

Look for this button inside



- Free Brushes
- Free Base Image
- Free Fibonacci Spiral

2D
ARTISTConcept Art, Digital & Matte Painting Magazine
Issue 045 September 2009**INTERVIEWS**
Guillaume Menuel**ARTICLES**
Beyond Synesthesia: Interview with Justin Lassen
The Sketchbook of Cliff Childs**GALLERIES**
Richard Anderson, Arnaud Valette
& Randis, plus more!

PERFECTING PERSPECTIVE, LIGHTING AND COMPOSITION

**FUTURISTIC ENVIRONMENT**

Darren Yeow whips up a wonderful environment filled with cool shadows and warm colors using Google SketchUp as a tool to aid painting in Photoshop

**ORGANIC AND INORGANIC CUSTOM BRUSHES**

Nykolai Aleksander shows us how to create fabric & lace custom brushes in the second instalment of our returning tutorial series

**SPEED PAINTING AND CONCEPT DESIGN**

Björn Hurri jumps on board and shows us how to produce a character concept design sheet in the third part of our dynamic characters series

PROJECT OVERVIEW

David Munoz Velazquez talks us through the inspiration behind the intriguingly titled image, *Hovercraft Parrot*, whilst showing us the painting breakdown



Editorial

Welcome to issue 45, coming to you from a cooling U.K. (after a debatable summer), in which we aim to teach you the art of perspective, lighting and composition within our many great tutorial series' this month!

Darren Yeow is back with us to take us through the painting of a beautiful oriental-style scene which starts from just a simple 3D base knocked up

using the free and intuitive software, Google SketchUp (**p.50**). This is the third tutorial in this series and we're really pleased with how our artists have been using Google SketchUp in different ways to achieve their own unique goals. We hope you've enjoyed what we've brought you so far and that you'll learn many new techniques to help speed up your painting by integrating 3D into your workflow over this and our coming issues.

We welcome Björn Hurri to this issue to teach us a thing or two about creating character concept designs from an inside-industry point of view (**p.72**). Taking the theme of a warrior and a Photoshop paintbrush, he speedily paints for us a character in both an interesting front and back pose – showing us a neat trick of how to quickly get your back pose from the front without too much trouble along the way, too. The importance of Björn's workshop is all about creating a character that a 3D modeler can easily work from, which is perfect for this series contributed to by professional artists working in the industry, including Darren Yeow and Bruno Werneck. We'll be discussing dynamic and exaggerated poses next month when we introduce **Mark McDonnell** to 2DArtist, a designer working for the animation and entertainment industry, and author of the recent book on gesture drawing, *The Art & Feel of Making it Real*. In the final chapter of the series we'll be inviting **David Smit** to share his lessons on camera placement, framing, fore-shortening, and distortion. So plenty to look forward to!

Fans of Nykolai Alexander's work will be particularly thrilled to see her appear in three great articles this month. Not only is Nykolai taking us through the third chapter of our Beginner's Guide to Digital Painting series (**p.80**), but she's also here to teach and create for us the most stunning set of custom brushes for fabric and lace – shown in demonstration on this month's cover image (**p.62**). But even that's not all! On top of this we also have an exclusive for 2DArtist: an artist-on-artist interview by Nykolai Aleksander who puts the one and only **Justin Lassen** under the spotlight to find out about his life and plans following his work on the Synesthesia projects (**p.26**). This is a beautiful interview featuring work by greats such as **Alex Ruiz** and **John Wallin Libert**, accompanying the soulful responses from CG community legend, **Justin Lassen**.

Our artist interview is with **Guillaume Menuel** whose work we have fallen so much in love with that we've had to get it printed for the office walls! Guillaume has the ability to turn just a few brushstrokes into a powerful masterpiece, and currently a concept artist for Ubisoft, Quebec City, he took some time away from his digital canvas to satisfy our intrigue.

Contents

What's in this month?

Guillaume Menuel

Concept Artist at Ubisoft

Sketchbook

The Sketchbook of Cliff Childs

Beyond Synesthesia

Interview with Justin Lassen

The Gallery

10 of the Best 2D Artworks

Using 3D as a Base for 2D

3D Paint-Over by Darren Yeow

Custom Brushes

Fabrics & Lace by Nykolai Aleksander

Dynamic Characters

Part 3 – Speed Painting & Concept Design

Digital Painting

Beginner's Guide by Nykolai Aleksander

'Hovercraft Parrot'

Project Overview by David Munoz Velazquez

'Containment Breach Sub-Level 5'

Digital Art Masters: V4 Free Chapter

About us

3DTotal.com Ltd Information & Contacts

Editor

Lynette Clee

Layout

Layla Khani

Content

Lynette Clee

Proofing

Lynette Clee

Matt Lewis

Tom Greenway

Jo Hargreaves

Lead Designer

Chris Perrins

Marketing

Jo Hargreaves

Marketing

Richard Tilbury

Marketing

Chris Perrins

Jo Hargreaves

Free Stuff!

Wherever you see this symbol, click it to download resources, extras!

DOWNLOAD RESOURCES

Check out his playful portfolio on **p.6** for a generous helping of inspiration!

We feature **Cliff Childs** in our Sketchbook article this month, who has currently just returned from an internship at Sony Santa Monica Studios. Delve into this up-and-coming artist's sketchbook on **p.18** for tips on how to keep your concepts original and exciting, and then be sure to hop on over to our "making of" featuring the uniquely titled image, *Hovercraft Parrot*, on **p.92**, by **David Munoz Velazquez** – a truly inspired image from a fantastic portfolio that we're excited to learn a little more about!

I shall leave you to discover the Gallery and get cracking with your own masterpieces! See you next month for more where this came from. **Ed.**



Setting up your PDF reader

For optimum viewing of the magazine it is recommended that you have the latest Acrobat Reader installed.

You can download it for free here: [DOWNLOAD!](#)

To view the many double-page spreads featured in 2DArtist magazine you can set the reader to display ‘two-up’, which will show double-page spreads as one large landscape image:

1. Open the magazine in Reader;
 2. Go to the **View** menu, then **Page display**;
 3. Select **Two-up Continuous**, making sure that **Show Cover Page** is also selected.



If you're having problems viewing the double-page spreads that we feature in this magazine, follow this handy little guide on how to set up your PDF reader!



Contributing Artists

Every month many artists around the world contribute to **3DCreative** and **2DArtist** magazines. Here you can find out more about them. If you would like to be a part of **3DCreative** or **2DArtist** magazine, please contact:

lynette@3dtotal.com



Guillaume Menuel

A 27-year old French artist currently living in Quebec, Canada. He's now working as a concept artist at Ubisoft in Québec City after four years at Ubisoft in Paris, where he worked as a 3D artist and artistic director. He's also currently thinking about a comic project based on his recent personal works.



<http://gmgallery.blogspot.com/>
guigui_oni@hotmail.com



Justin Lassen

A well respected multi-instrumentalist, composer, remixer and producer with nearly 15 years of experience in the music, film, and video game industries. Lassen's masterful compositions have been praised and quoted by leading CG artists, film, game and music professionals the world over. In 2006 he released his wildly successful "Synesthesia" series, melding the worlds of music and CG artwork together.

<http://www.justinlassen.com/>
jl@justinlassen.com



Nykolaí Aleksander

Born in Germany in 1978, she moved to England in 1999, and currently lives in South Africa with her husband. She's been painting digitally since 2002, and works as a freelance illustrator for both private clients and companies.



<http://www.admemento.com>
x@admemento.com



The Breath On Your Neck by Branko Bistrovic

Contributors

2d
artist



Darren Yeow

27-year old self-taught illustrator, originally hailing from Adelaide, has worked as a concept artist, user interface designer and art director in video game companies for the past four years, and currently lives in Melbourne. Outside his full-time role as an in-house concept artist working on next-gen games, he tutors hopeful young artists, works on commissioned freelance projects, and is writing a book for those wishing to pursue a career in concept art.

darren@stylus-monkey.com



Björn Hürri

A concept artist and illustrator currently employed by multi award-winning, The Creative Assembly. He spends most of his days painting illustrations and concepts for all of their current and future titles, and in-between spending his time painting both day and night, he takes care of his wonderful wife and his now one-year old son.



<http://www.bjornhurri.com/>
bjornhurri@hotmail.com



David Munoz Velazquez

A multi-disciplinary artist specializing in character design, lighting, and digital sculpting. He studied graphic design for five years, after which time he worked as a freelance graphic designer, also spending time painting. Before moving to the animation industry he worked in videogames for four years, and for another year freelance. He's currently working in the animated film industry, at Kandor Moon.

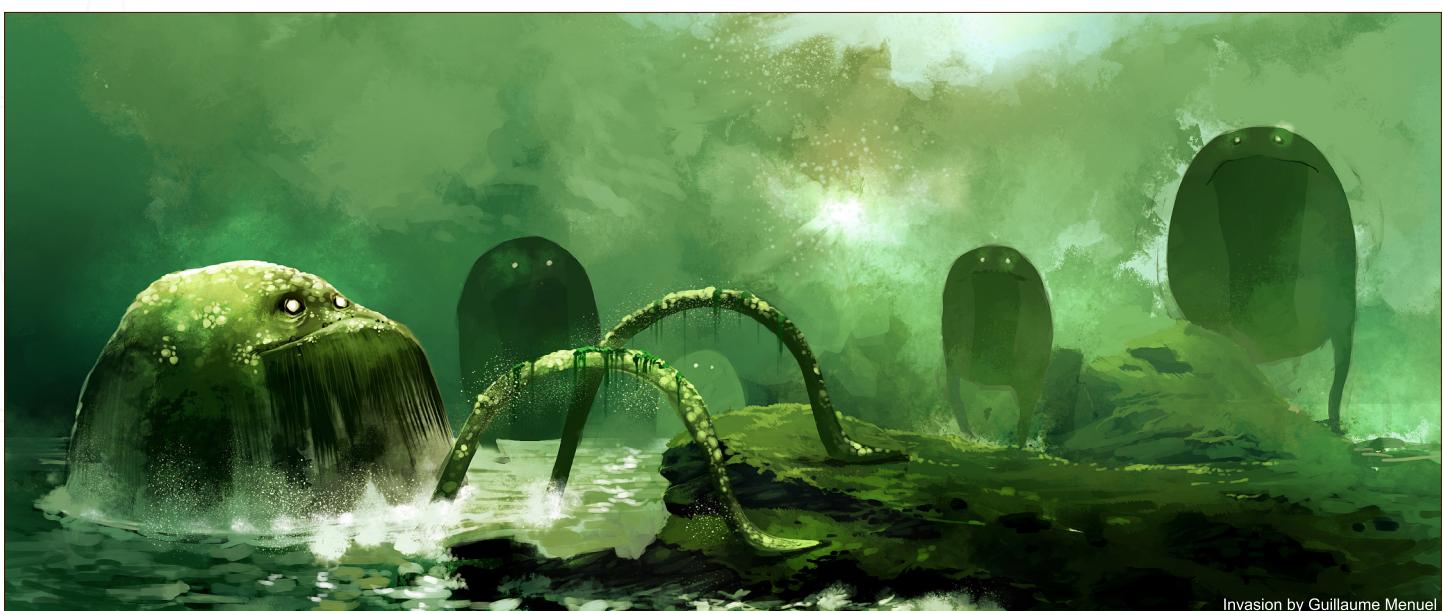
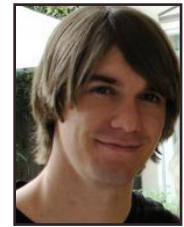
<http://www.munozvelazquez.com/>
munozvelazquez@gmail.com



Cliff Childs

Moved to the L.A. area from St. George, Utah to attend Otis College of Art and Design. His undying love for videogames led him to discover the world of digital painting and concept art. He has recently been part of the *God of War 3* team as a junior concept intern at Sony Santa Monica Studios. He plans on one more year at Otis before pursuing a career as a concept/freelance artist and illustrator.

<http://cliffsconcepts.blogspot.com/>
cliffchilds@gmail.com



Invasion by Guillaume Menuel

"It's a vision of an apocalyptic world at war where a stupid army full of mechs and big vehicles decides to invade beaches, because there's sun at the beach you know..."



GUILLAUME MENUEL

We fire a few random questions at Guillaume Menuel and he shoots back some whacky answers ... well I guess that's how an interview usually works, but anyway it's a good read (mainly about bikini girls and robots) so get going!



Interview with Guillaume Menuel

Hi Guillaume, can you start by telling us a little about yourself and what you do for work and play?

Hi Tom, I'm a 27 year old French artist. After four years working for Ubisoft, Paris as a 3D artist and artistic director, I left last year for Ubisoft, Quebec City where I'm currently working as artistic director.

As you can imagine, after work I need to paint and draw for myself; to escape from a very binding industry and have some fun. I like video games a lot and I like my work, but I can't only devote myself to it. So that's why personal painting, playing music, movies, beer and friends are so welcome!

Sounds like a nice lifestyle! Having moved from Paris to Quebec City, what would you say are the main differences between a French Canadian city and French city?

People's mentality is so different! I have the feeling here that everything is much more simple. In Quebec I can really breathe! Paris and Quebec City are two different dimensions; I love both, but Quebec City is such a peaceful and sweet place to live. But I must say I do miss the energy of Paris. It is a very inspiring city ...

“Nothing is taken seriously in my work. I try to mix all the elements and create surrealist situations”

Red stars and red bikinis! I see them everywhere in your portfolio; there are lots of bikinis throughout and you seemed to grow fond of stars in 2008 and 2009, why is this?

Thanks for the question, it's the first time I've had to wonder about the whys of all of this. Well, I have a simple answer for bikinis, just one word: sexy! There is no great philosophical answer, I'm afraid, just a primary feeling. But I don't want



to represent girls as stupid big-boobed babes; I draw them as strong characters. They're sexy, but don't try to fool them.

For the stars, as you've seen it's a military representation - I always been fascinated by

military visuals. Also the star is a cool graphical pattern, I like it for its simplicity and strength and I'm fascinated with its use in political and military history. But I don't want to use it just because it's cool; I try to laugh about its political significance by applying it to funny mechs and







vehicles. Nothing is taken seriously in my work. I try to mix all the elements and create surrealist situations.

As you say nothing is taken too seriously with your work - are you aiming to amuse the viewer or convey some other feeling? Or don't you really think too much about the viewer's opinions and just draw for yourself?

Many very talented artists have already painted serious and realistic stuff that I admire. Rather than copying them badly I prefer to continue creating crazy stuff that is very natural for me to make! Of course when I draw I think about the people who will see my work (especially professional people) and that's why I try to make the best picture I can. Having viewers pushes me to give the best of myself, and I don't like bad crits - even if I need them and take them very seriously [Laughs]! But every picture you've seen from me is a personal project. I think about a scene, I find it cool and fun, I paint it and it's so cool knowing someone took it as the wallpaper on their computer!

“Actually I always seem to come back to the same color palettes”

If I was asked the one thing I like best about your work, I would say it is the colours you choose. You seem to have a natural ability to pick the most beautiful, yet subtle, colour palettes - can you tell us a little more about this? Wow, thanks for that! I wouldn't say it's a natural



ability; when I paint I take a lot of time trying out different colors and mixing layers - it's probably the longest part of my work. I wish I could decide before starting a work what my palettes will be, but they're always changing at different stages. Actually I always come back to the same palette. I don't know yet if I like it like that or not, but there it is! And if you like it, maybe I should continue this way.





There are lots of cute robots running around in your portfolio. Why do you love to paint them and what are your influences for these characters?

It definitely comes from my interest in Manga, Japanime and SF movies. I guess my interest in robots came from the same reasons as everyone else who draws robots. I like to draw them because of their graphical malleability: you can do what you want with their shapes. But it also a lot of fun to be able to give them a personality with very few details; sometimes you can make them much more expressive than humans. They tend to be cute in my drawings, because as I said previously, I don't take things too seriously in my work.

Have you ever tried any other mediums, such as 3D modelling, for your robots?

I used 3D for a few years in video game industry, but for more than two years now I've only worked with 2D tools and I prefer that so much! I'd love to make a short movie or a video game demo based on my characters - that would be a good opportunity to come back to 3D tools. Well I say that, but I'm actually currently working on a picture with a friend (also an artist at Ubisoft), which mixes 3D and 2D (he creates the models and scene and I paint over it).

I also work a little bit with acrylic on canvas. In the past I used to work a little with argyle and I'd love to try urban painting and make my mech army invade city walls!

Your images "Red Star and Bikini" and "Beach Robots Attack" have a lot of similar elements.

Are these images based on anything in particular?

Not really, they both present a vision of an apocalyptic world at war, where a stupid army full of mechs and big vehicles decides to invade beaches because there's sun at the beach, you know... but bikini-clad girls won't let that happen! Maybe the script for a comic or something else? Who knows [Laughs]!



Your image "Miami" was one of our favorites to be published in our book *Digital Art Masters V3*. How did you find this whole experience?

This experience was great! It was the first time my personal work had been professionally published, so I was really excited about it. It was even more exciting that I had the opportunity to explain the background of my picture and how I worked on it. I didn't have time this year to participate to the new volume of *Digital Art Masters*, but I'll be there next time!

I'm going to hold you to that Guillaume! Call for entries will be around October some time and I'm expecting to see some red bikini-clad girls chasing some crazy robots! Thanks again for your time and it's been great chatting, Tom.

Thanks to you too! I'll be there in October and stupid robots will definitely be there trying to conquer the world!

Guillaume Menuel

For more work by this artist please visit:

<http://gmgallery.blogspot.com/>

Or contact them at:

guigui_oni@hotmail.com

Interviewed by: Tom Greenway

AVAILABLE NOW!

DIGITAL ART MASTERS

: VOLUME 4

288 PAGE PREVIEW ONLINE!



FEATURES 50 OF THE FINEST DIGITAL
2D AND 3D ARTISTS WORKING IN THE
INDUSRTY TODAY, FROM THE LIKES OF:

LOÏC E338 ZIMMERMANN | JAMES PAICK

CRAIG SELLARS | JELMER BOSKMA

MACIEJ KUCIARA | DAARKEN | MAREK DENKO

KEKAI KOTAKI | ANDREW HICKINBOTTOM

MAREK OKOŃ

BUY THE BOOK TO SEE JUST HOW
THEY CREATE THEIR INCREDIBLE
IMAGERY!

HARDBACK - 21.6CM X 27.9CM IN SIZE

288 FULL COLOUR PREMIUM PAPER PAGES

ISBN: 978-0-240-52171-8

"DIGITAL ART MASTERS IS GETTING
BETTER AND BETTER AT SHOWCASING
SOME OF TODAY'S BEST DIGITAL
ARTISTS. THE WAY THE BOOK SHOWS
THE PROCESSES OF ACHIEVING
GREAT PICTURES PROVIDES A GOOD
OPPORTUNITY TO LEARN FROM THESE
ARTISTS, AND KEEPS YOU CHALLENGED
IN YOUR OWN ART."

RAPHAEL LACOSTE | WWW.RAPHAEL-LACOSTE.COM/





LEARN HOW TO DESIGN ENVIRONMENTS FROM THE PROS



FUTURISTIC
SET
DESIGN

HISTORICAL
SET
DESIGN

CONTEMPORARY
SET
DESIGN

New 3-Disc Series
with James Clyne

**The Gnomon Workshop is the leader in professional training
for artists in the entertainment and design industries.**

Over the past seven years, the Gnomon Workshop DVD library has expanded to offer training by over ninety professional instructors on a diverse range of tools, software and media including design, drawing, sculpture, painting, modeling, texturing, animation, effects and compositing. Shipped to literally every corner of the globe, our DVDs can be found in countless libraries, studios and universities... and on thousands of bookshelves.



OVER 200 TRAINING DVD TITLES - ORDER ONLINE!
WWW.THEGNOMONWORKSHOP.COM



James Clyne

“ James Clyne is a master when it comes to translating his inner worlds of gigantic structures and machines. His smart construction approach, based on a very open abstract process, gives to his productions a very original feel unseen anywhere else. ”

- Sparth
Concept designer/illustrator

"The sketch phase is my favorite because it allows me to go crazy with shapes and value without thinking about anything specific, and it allows me focus on composition"



SKETCHBOOK OF CLIFF CHILDS

Cliff Childs is currently a student at Otis College of Art and Design who has just completed an internship at Sony Santa Monica Studios. Checking out his sketchbook we can see we have an artist destined for big things on our hands here, so read on to find out how food and skin can help him with his color decisions when taking his sketches into color, and discover how he goes about keeping his artwork original and interesting!

SKETCHBOOK OF CLIFF CHILDS

CHARACTERS

With my quick sketches I usually have a direction I want things to go in, and the main theme for these was to come up with something odd and interesting by combining weird creatures with human qualities (**Fig.01a – 02b**). I started with some loose line drawings, working directly on the Wacom tablet, and then blocked in light and shadowed areas. Once I was happy with the creature and the pose, I worked out the values a little more whilst thinking about light direction.

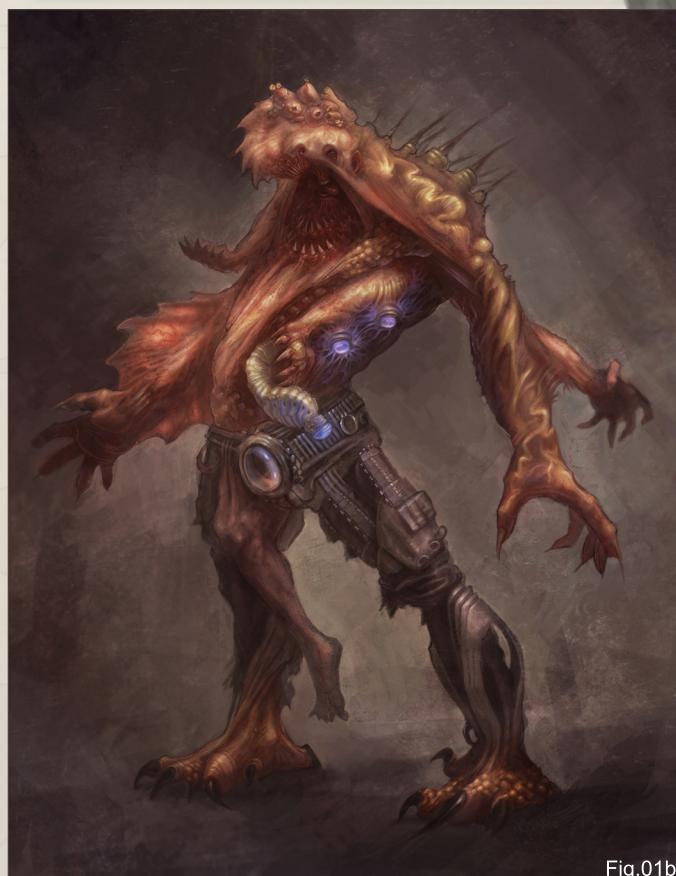


Fig.01b



Fig.01a

“Overlaying photos of food or skin is a great way to find interesting color variations”

When moving to color I like to first use Overlay, Soft Light, and Color layer blending modes in Photoshop so that I keep some detail from the grayscale. Overlaying photos of food or skin is a great way to find interesting color variations – once I see a set of colors that I really like, I usually color-pick from there to finish building up my characters.



Fig.02b



Fig.02a



GRAYSCALE TO COLOR

A great way of starting color is to lay down some base colors just to help set the tone and mood. In the tank and sci-fi sketches (Fig.03 – 04), I took any random photograph that had a great set of base colors (like a desert for the tank and an underwater picture for the sci-fi piece) and played with the layer types in Photoshop until I found something that looked good whilst not washing away my sketches. I sometimes blur the photos until

“I sometimes blur the photos until they become just smooth colors.”



they become just smooth colors. In the sci-fi sketch I made a stroke of color under the Color Dodge layer to create a glowing light effect, and then duplicated that to create beams of light. If I see some section or piece of a sketch that is interesting, I like to duplicate just that section and transform it in other areas of the sketch to add some repetition and continuity.

Fig.03

SKETCHES

Most of the time, I find the best way of coming up with an idea is to just randomly throw down interesting brushstrokes/shapes and only focus on making the values and composition work. I will usually then begin to see something that will spark an idea of what kind of direction I want to take it.

Using shape tools and the Lasso Tool is a good way to start a man-made environment, and loose texture brushes are a good way to start something that looks natural and organic. Sometimes starting with random photos causes me to create something that I never would have thought of, and it also helps for setting a solid perspective. In the industrial sketch (**Fig.05**), I started with a picture of screws, nuts, and bolts and turned that into a city – randomizing is a great way to help me look only for interesting shapes within a photograph.

“Randomizing is a great way to help me look only for interesting shapes within a photograph.”



Fig.04a

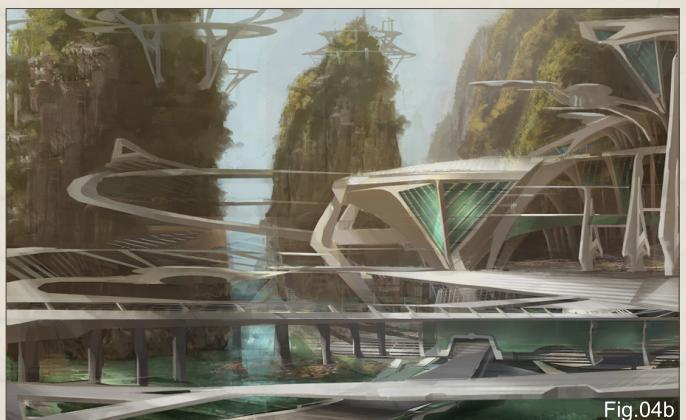


Fig.04b



Fig.05

The sketch phase is my favorite because it allows me to go crazy with shapes and value without thinking about anything specific, and it allows me focus on composition. My ideas usually come to me as I paint; I hope that my sketches lead to images that look different and interesting. Instead of making something recognizable into something interesting, I try and start with something interesting and then make it somewhat recognizable. That way it has more originality!

Cliff Childs

For more information please visit
<http://cliffsconcepts.blogspot.com/>
or contact
cliffchild@gmail.com





Offers high quality 3D Models, Video Tutorials and Digital Doubles,
With exclusive access to an ever growing Database of Freelance Portfolio models

Try our Pearl, Emerald or **RUBY** Memberships for Unlimited Downloads

i
r
-
m
o
d
e
l
s

breaking the mold

www.ir-models.com

£75 'Pearl' Membership for 6 Months Access (excluding freelance files)

£100 'Emerald' Membership for 1 Years Access (excluding freelance files)

£350 'RUBY' Membership for 1 Years Access (all inclusive)

Why not join today?

"I constantly have a feeling that the music is just going to burst out of my chest at any point with an intensity I can't control. I keep myself on edge, never letting myself explode, because I know I would lose all touch with reality if it ever came out all at once like that."



AN INTERVIEW WITH MUSICAL MASTERMIND, JUSTIN LASSEN

BEYOND SYNAESTHESIA

Nykolai Aleksander, CG artist, close friend and co-collaborator in Justin's "Synaesthesia" project, took some time to sit down and talk to Justin about all the things that make him tick, and discover a side to him that may yet be unknown even to hardcore Lassen fans.

Beyond Synesthesia

An interview with musical mastermind, Justin Lassen



Introduction

His scores sound like "a giant pot filled with Enya, Aphex Twin, Philip Glass, Danny Elfman, Blue Man Group, and Nine Inch

Nails swirled together until there is a black goop burning at the bottom of the fire while steaming piles of James Horner, Charlie Clouser and Rachmaninov flow into the atmosphere..." - or so it has been told.

But Justin Lassen, who has worked with celebrities such as Madonna, Robert Miles



and Nine Inch Nails to name but a few, is more than just another composer. He is a visionary in the true sense of the word. He's a dreamer with a knack for the dark and mysterious (no

doubt something that runs in the genes, being a direct descendent of one of the famous Grimm Brothers), as well as someone who has managed to stay with both feet firmly on the ground.

An Interview with Justin, by Nykolai Aleksander

Hi Justin! First I want to thank you for doing this interview! I'm all excited ... I've never done this before, so let's hope I won't screw up too badly! OK, how about we start with the usual stuff:

Could you tell the readers a bit about yourself?

Hello, and thanks for having me do this interview!



Well, I'm a generally type casted as a dark artist/composer/remixer/producer/musician, but I am also many other things. I work in a lot of different industries like films, videogames, music, radio, media, etc. doing a lot of different odd jobs and things. Not all of it is music or graphics; sometimes it's just spreadsheets and business plans, or presentations for talks at schools or pitch meetings. Whatever the project is, I just make sure to do the best I can.

I was born in Colorado but mostly grew up in Arizona, and I'm 100% self-taught musically, though I was in any school choir I could get in, all my life during those years (tenor). [Smiles]



Aside from apparently always having a love for music, what else did you do when you were growing up – any hobbies worth mentioning?

Any dream jobs you thought up as a kid?

Growing up, I was either all in, or not at all. There was no half-way of doing things in my eyes. If I couldn't give it my all, I wouldn't try at all. I didn't see the point. I had to figure things out to the fullest.

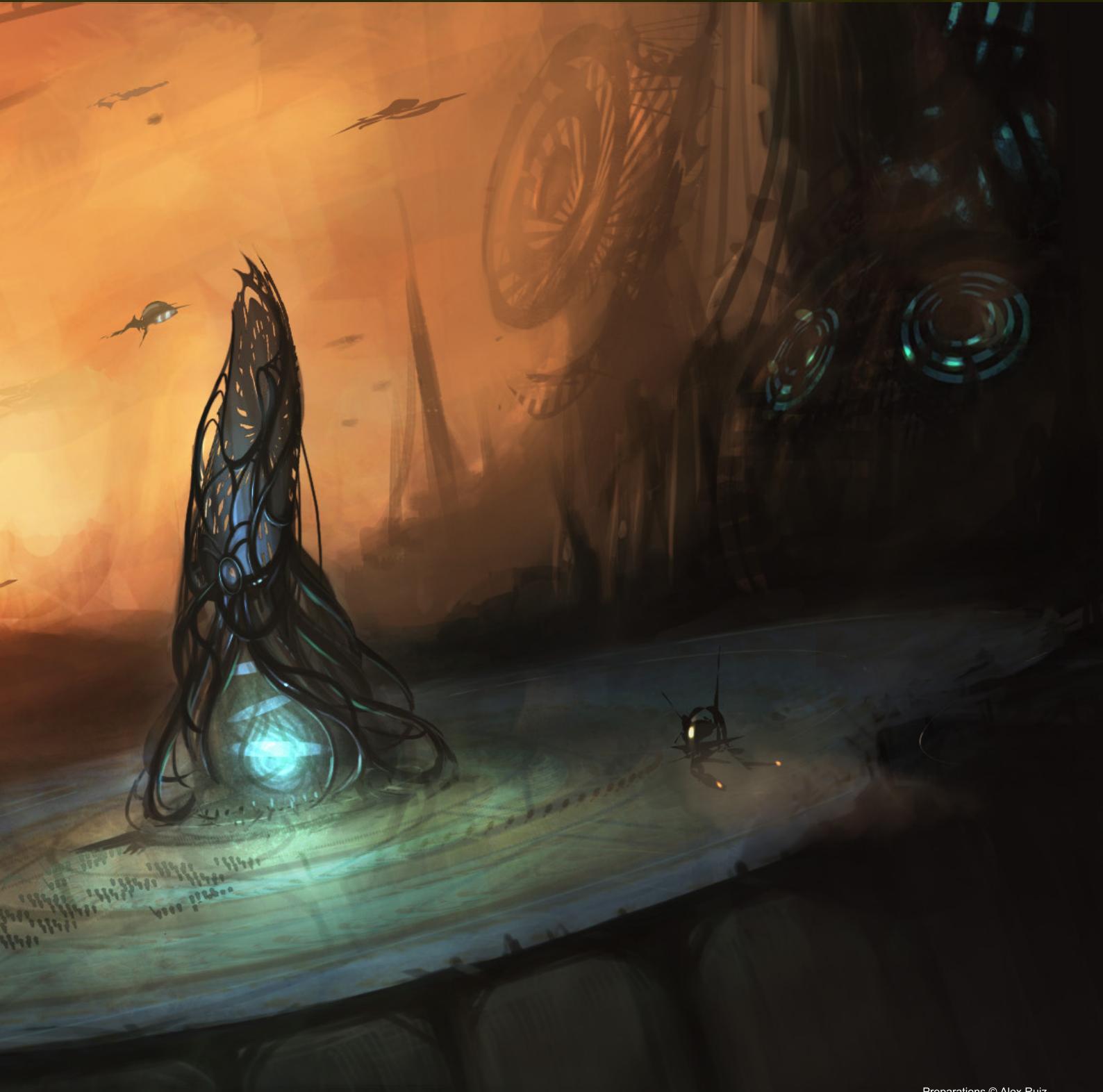
When I was into science and chemistry, I didn't just get a chemistry set, I got 10, and I ordered from the real chemistry lab catalogues – new

“When I was into writing plays, I got all the neighborhood kids and put together productions for all the parents at my house.”

beakers and test tubes and such. When I was making films, I took advantage of my family's cameras to the fullest, from VHS to JVC to MiniDV; I grew with the technology as it progressed and created dozens of short films, as I wanted to be a director one day. When I was into computers I learned Basic, Pascal, C/C++, Visual Basic, and whatever else came along.

When the internet started I made it a point to learn Perl/HTML/JavaScript, etc. I learned even technologies that are obsolete today. I don't do as much programming or any of that stuff because music became my true love.

When I wanted to be a magician, I didn't just learn a few tricks, I took magic classes, I bought tons of books about tricks, I dreamed of one day



Preparations © Alex Ruiz

having a show, I put on shows. When I was into writing plays, I got all the neighborhood kids and put together productions for all the parents at my house. There was so much I did younger, and did to the fullest. I have no regrets. I like who I have become.

One dream that I would love to return to one day is marine biology. I've always had fantasies about the sea and oceans, and snorkeling for the first time in Cancun last year really re-ignited that spark inside of me. I think the oceans are the most beautiful things that we have on Earth.

I love underwater documentaries and deep sea exploration. If in the apocalyptic future when I can't make the music I love, I would return to that kind of work and keep learning as much as I can.

Even as a composer, I read so many books and learn so many things; I think life is my university and there is never a graduation date. I love documenting and archiving, which yet another passion of mine. I try to theorize how we as a people will be able to save all of our digital memories. This technologically advanced

society cannot go on forever, and maybe one day this record of it will be lost and future generations will have to start over from scratch again? Maybe we've been through this cycle a few times? This idea fascinates me.

How did you start in the music industry? Was it a slow process, did you actively seek work, or were you discovered in some way?
I was always fascinated with digital music creation from the mid 90s, but it wasn't until the late 90s I started taking it more seriously as a career, as opposed to a hobby. That proved to



Something was left behind © Kirsi Salonen

be the best choice I ever made. You have to give it your all, or nothing will happen.

At first I didn't know what to do; I sent out random demos to tons of labels (this was before we had MySpace and things like that). It didn't quite work, but ultimately I got my first industry gig from one of my heroes, Robert Miles, a brilliant platinum composer/artist that I was listening to for ages. After working on that project I started to get noticed by everyone and one thing lead to another ... and here I am today.

For the technically inclined readers, what kind of programs do you work with, and what kind of computer power do you have at your disposal? Believe it or not, I started making music on a 286 computer, at 33MHz and just 2MBs of RAM

“... that's when I felt my first sincere connection with a CG artist's vision...”

with software like Midisoft Recording Studio and Cakewalk. Over the years I've gotten more powerful machines as they've come out. I divide my time between two types of composing processes: mobile and desktop. I do a lot of travel around the world, so the last few years has required me to have kick-ass laptops, filled with the best sounds to jot down all my ideas, so it's usually Centrino systems. My current laptop is a Core2 Duo 2.8GHz, 4GB RAM – plenty to get a bunch of work done.

My stay-at-home desktop workstation is an Intel Core i7 Extreme Edition running at 3.2GHz and all the RAM and hard drive space I could ever need. Between the two, I have enough power to

do all kinds of projects and styles. I use software such as FL Studio, Sonar, Acid, Sound Forge, and so on.

Many of us frequenting the CG scene will know about your “Synesthesia” project, a series of compositions that not only accompany CG images by various artists, but are the essence of those images in sound. You were the first to combine the two art forms. What was it that made you do it, and how does it feel to be the “founding father”, as it were, of a new art form altogether?

Well, right after I invented the internet, I decided that it needed a new art form, so I very quickly put it together in a very founding-fatherly way.

[Laughs] Just kidding! But for real, there was not any intention to create something new like that. I was just as mesmerized by the end result as the fans when it was all said and done.

I was staring at a beautiful painting by Martin Bland in 2005 called "Medusa Fields", which I fantasized for a while about, and after reading the description of it, "30 years have passed, still the epitaph of past conflict stands, the legacy of that fateful day, when the weapon was deployed, a permanent reminder of our failings, a permanent lesson for future society, these fields are sacred, doomed, cherished" I was hooked. I had goosebumps; I had felt its soul. At first I knew what was going on in the scene, but when I read the confirmation and it was just as I imagined, that's when I felt my first sincere connection with a CG artist's vision, and a beautiful string piece played out of my fingers like a ghost playing or something. I knew I had something special when I heard it played back.

The CG artists tend to ask, "How did you know what was in my head?" After the first series was released, I knew I had something special, unique and original on my hands; to have been the world's first and still only composer to be front cover featured and celebrated on most of the top CG websites and magazines, was not only a huge honor (because I respect CG artists to the core), but also very humbling. I get so many supportive mails from CG artists and fans who all say my music has helped them in some way, which makes it all worth it.





An interview with musical mastermind, Justin Lassen

Beyond Synesthesia

Could you briefly explain the process of writing music for images? What is it that triggers you to want to write a piece for an image? How does it start?

This is a good question. I think the thing to keep in mind is that not every image makes me feel like composing. I think the thing I look for in a work, is the soul. I look for mythologies built into the setting. Not just colors triggering notes, but worlds that I feel could actually come to life. If I can't immediately see the soul, it doesn't mean it's not in there, it's just that I must be blind to that vision. [Smiles]

"I would describe music as oxygen; if you lose too much of it, you die."

To me, the magic part about writing for images is that there is no process at all; if it triggers me to compose, it does it instantly and there's no complicated nonsense in the way, no step by step. The music will just flow from my fingers to the keyboard, or whatever instrument I'm playing at the time, almost instantly, and I immediately become transported into that world. The image becomes my desktop wallpaper and I live with that vision while working on the music for as long as I need it. I am a world traveler I guess, and I don't mean just here on Earth. [Winks]

If you could start over with the "Synesthesia" project, is there anything you would do differently?

Interestingly enough, there wasn't a big mischievous scheme, no product was designed, no business plan; it was quite literally just my love for art, and especially CG artists and CG communities around the world.

I suppose maybe it would have been smarter to productize it much sooner or create a more central hub for the fans, but would that have been a wise decision? Would it have cheapened it? Or did it happen as it was going to happen, no matter what? I suppose the magic of



The Chase © PAUL GERRARD

discovering my Synesthesia series, is the discovery part of it, itself.

I don't know the answers to these questions. I think I'm happy with the way the project worked out all these years, and all the fans I got from it. I think they can tell it was my heart speaking, and sometimes crying, and not me inspired by my need for survival.

That reminds me of a beautiful quote I once heard about music that "it is not about what you hear, not about the notes played and the melodies consumed, but about the empty spaces, the silence in between that makes it

sing." – Any thoughts on that? What would you say if asked to describe music in one sentence? I agree with that statement. I think there are all kinds of impressive musicians in the world; some who can shred a thousand notes a second on a guitar in melodic death metal, or a pianist virtuosi playing the keyboard at such an intensity, as if he or she has six fingers on each hand, or seemingly four hands total – much like the hero in the film, "The Legend of 1900", when he was showing up that jazz pianist in the final "battle" scene.

I don't have my head in the sand on these matters. I, of course, think that is a very

impressive feat, but I don't necessarily draw a personal or deep connection with that sort of complicated stuff. Bach is incredibly genius and talented, and so complicated with his "inventions", yet Beethoven's Moonlight Sonata, which has tons of blank space and room to breathe, can touch me more? Why do I love Samuel Barber's "Adagio for Strings" choral arrangement? Because it is simply beautiful, yet full of complexity in other ways.

I would describe music as oxygen; if you lose too much of it, you die. Get your fix whenever you can, because maybe one day we won't have this much accessibility to music...





An interview with musical mastermind, Justin Lassen

Beyond Synesthesia



Thoughts © Alex Ruiz

CONCEPTMONSTER.NET

It's interesting that you mention Beethoven, because that quote was made about his music! Anyhow, what would be your dream environment or conditions to work in? Honestly. No holding back.

I've always fantasized about being kinda in the same situation as the main character in Charles Dickens' "Great Expectations". I dream of some random lawyer/patron of the arts/rich/illuminated type who would like to remain nameless, whom I don't know or ever heard of, to set me up in a sacred and gifted place with all that I need, and access to ensembles and instruments and costumes to boot. I can imagine waking up in a castle somewhere with all the proper amenities, no bills, not a typical care in the world – just music and creation and collaboration and experimentation.

I often wonder what it must feel like to be a "trust fund" kid, or generally people who could do anything, but choose not to. I know a lot of these types of rich people who don't appreciate their

own "wealth" or use it to their advantage; t seem to just live from one day to the next trying to blend in. Musically, I feel like all that I've given the world is only but a taste, even to me. It was a tease, a mean joke on myself.

"I live in little "moments" of time that transition and fade into each other..."

I often cry myself to sleep thinking of all the symphonies in my head and in my dreams, and I constantly have a feeling that the music is just going to burst out of my chest at any point with an intensity I can't control. I keep myself on edge, never letting myself explode, because I know I would lose all touch with reality if it ever came out all at once like that. It could possibly be dangerous, like writing four symphonies at the same time. I do hope to one day create these stories and orchestrated happenings ... I know, it's a selfish and simple dream, but it is mine.

Scenery and environments are so very important to me ... I have to live life, and balance life and dreams, and most of the time the dream suffers to maintain the life. I also wish for a gorgeous, very old extended octave (9) stage piano. [Smiles]

I have known you for about six years now, and I can't believe I've never asked you this, but ... [Grins] lollipops or ice cream? And what flavor? That's an easy one! Ice-cream: mint and chocolate chip. [Smiles]

Fizzy or Flat? – Drinks, not ice cream.
[Laughs] Fizzy, or never mind!

Sounds good to me! OK, before anyone thinks we're losing it ... in closing, are there any big projects you are working on at the moment, and what are your plans for the future?
There are always projects – big and small – going on constantly, and always on a global scale. People don't realize because I don't make

"When I first heard from Justin Lassen, he didn't approach me empty-handed. His efforts were accompanied by glowing references from the artists he'd composed his work for already. He had several finished spots for me.

Harlequin © Nykolai Aleksander

"His work shines a new light of inspiration for digital visual artists and is the ultimate jamming collaboration for those lucky enough to have music composed by him from their images. Many go on to create deeper, more voluminous pieces. It was worth revisiting his journey on CGSociety.org.

"This leap into aural experimentation continues to bring amazing dimensional expansion to visual digital arts. I hope he continues and I wish Justin Lassen well." – **Paul Hellard, Editor, CG Society & Ballistic Publishing**

it apparent on the websites, but I'm constantly in touch with all kinds of creative people around the world in various countries, dreaming up and working on gorgeous ideas and contraptions. I am honored and humbled to have earned the amount of cool fans I have, big celebrated and small obscurities, in the work that I've put out into the world all these years. I really hope to be able to keep putting out more and more work as my life continues to progress and I continue to write new chapters in this sometimes dramatic story I'm eagerly the star character in.

I wish I could plan for the future like normal people, but lately it's been unfolding in front of

me, without my permission. I wish I could live out of an Outlook Calendar or iPhone like all the other normal business people in the world, but my days don't have 24 hours like everyone else's, and my years don't have 365 days. I live in little "moments" of time that transition and fade into each other on a constant basis. Now that we are beyond the Synesthesia series, I look forward to my future as much as anyone else and I can't wait to see what comes out next. I am on pins-and-needles now.

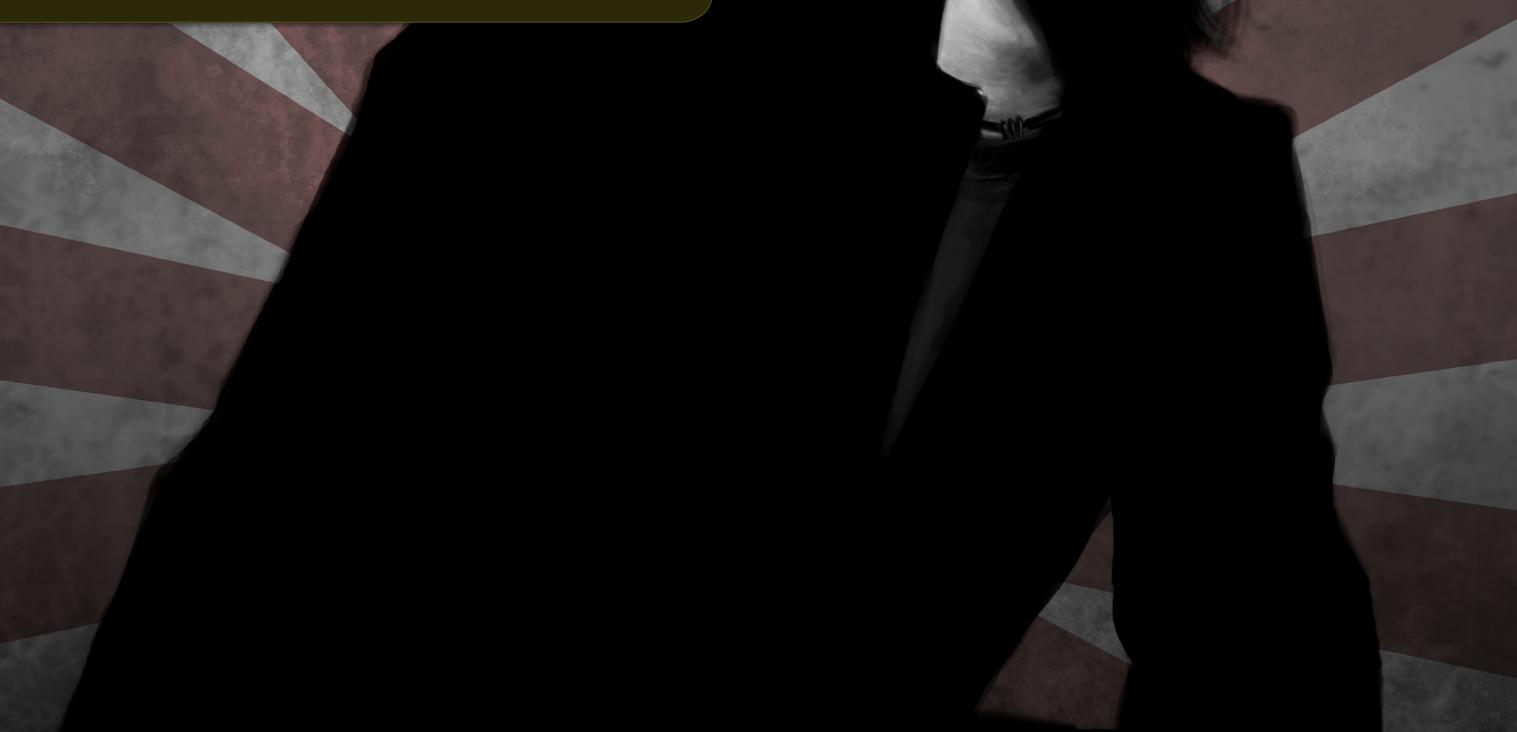
Any last words before we are told to shut up?
[Smiles]
Never shut up. Always dream!

Justin Lassen

For more information please visit
www.empireofmodernthought.com (website)
<http://www.justinlassen.com> (blog)
or contact: jl@justinlassen.com

A 2-Disc Special edition CD with all tracks from the Synesthesia project is scheduled for release in October 2009.

Interviewed by: Nykolai Aleksander
For more information please visit:
<http://www.admemento.com/>
Or contact: x@admemento.com





Luxology®



modo is for artists

VANCOUVER FILM SCHOOL GRADS UNITE IN DISTRICT 9

VANCOUVER FILM SCHOOL congratulates **Neill Blomkamp**, a graduate of the one-year VFS 3D Animation & Visual Effects program, on his first feature film, the acclaimed *District 9*!

41 talented VFS alumni helped realize Neill's innovative vision for what critics are calling "a landmark film", and we're proud of all of them.

Exclusive interviews, video, giveaways, and more
[» vfs.com/D9](http://vfs.com/D9)



VFS ALUMNI ON DISTRICT 9

- Neill Blomkamp (Graduated 1998)
DIRECTOR & CO-WRITER
Terri Tatchell (2001)
CO-WRITER
Shawn Walsh (1997)
VISUAL EFFECTS EXECUTIVE PRODUCER
James Stewart (1997)
CREATURE SUPERVISOR
Robert Bourgeault (1997)
LIGHTING LEAD
Derek Stevenson (1998)
MATCHMOVE LEAD
Brett Ineson (1996)
MOTION CAPTURE SUPERVISOR
Christopher Ahrens (2006)
LIGHTING ARTIST
Geeta Basantani (2001)
COMPOSITOR
Peter Benson (1999)
MOTION CAPTURE ACTOR
Jelmer Boskma (2006)
MODELER
Freddy Chavez (2005)
VISUAL EFFECTS COMPOSITOR
Dominic Cheung (2005)
LIGHTING TECHNICAL DIRECTOR
Paul Copeland (2005)
VISUAL EFFECTS ARTIST
Anthony Di Ninno (2006)
ANIMATOR
Ian Fenton (2001)
COMPOSITOR
Brian Harder (2000)
CREATURE RIGGER
Nathaniel Holroyd (2007)
VFX COORDINATOR
Bernhard Huber (2006)
EFFECTS ANIMATOR
Steve Johnston (2006)
RENDER WRANGLER
Patrick Kalyn (2001)
ANIMATOR
Bernhard Kimbacher (2007)
VISUAL EFFECTS DATA COORDINATOR & COMPOSITOR
Julianne Kolakis (2006)
CREATURE TEXTURE PAINTER
Veronica Marino (2006)
COMPOSITOR
Adam Marisett (2005)
VISUAL EFFECTS ARTIST
James McPhail (2007)
VISUAL EFFECTS TECHNICAL DIRECTOR
Nikolai Michaleski (1997)
COMPOSITOR
Jacob Miller (2006)
MATCHMOVE ARTIST
Francisco Moncayo Moreno (2007)
DIGITAL EFFECTS ARTIST
Brendon Morritt (2004)
DIGITAL ARTIST
Fernando Pazos (1996)
ANIMATOR
Dan Prentice (2004)
CG ARTIST
Mike Rhone (1999)
VISUAL EFFECTS ARTIST
Cynthia Rodriguez del Castillo (2007)
DIGITAL PAINT & ROTO ARTIST
Cesar Rodriguez Bautista (2006)
DIGITAL PAINT & ROTO ARTIST
Marc Roth (1997)
VISUAL EFFECTS ARTIST
Ben Burden Smith (1999)
MOTION CAPTURE FIRST AD
Richard Sur (2006)
LIGHTING TECHNICAL DIRECTOR
Anna Tonrungroj (2006)
DIGITAL COMPOSITOR
Grant Wilson (1991)
ANIMATOR
Joey Wilson (2005)
MODELER
Samson Wong (2007)
MATCHMOVE ARTIST

SFS ANIMATION
& VISUAL EFFECTS

THE GALLERY

This Month we Feature Image from:

Mateja Petkovic

Florian de Gésincourt

Ioan Dumitrescu

Arnaud Valette

David Smit

Branko Bistrovic

Vlad "Duke" Kuprienko

Pao (Thitipong Jitmakusol)

Randis

Richard Anderson

The Galleries

10 of the Best

send us your images! : lynette@3dtotal.com

2d
artist

Days of Victory

Ioan Dumitrescu aka jonone
(Right)
jononespo@yahoo.com



The Medieval Kingdom

Mateja Petkovic
(Below)
www.matejapetkovic.blogspot.com
sqezavela@gmail.com

Winner of the CGTantra Futuristic Cityscape Matte Painting Challenge, sponsored by 2DArtist Magazine



 CGTANTRA
LEARN INSPIRE GROW



Futuristic Cityscape - Dubai in 100 Years

Florian de Gésincourt (a.k.a. dges)

<http://www.dges.fr>; <http://dges.over-blog.com>

contact@dges.fr

(Above)

Winner of the CGTantra Futuristic Cityscape Matte Painting Challenge,
sponsored by 2DArtist Magazine

Xwing

Vlad "Duke" Kuprienko

<http://www.3dreamlab.com>

admin@3dreamlab.com

(Below)





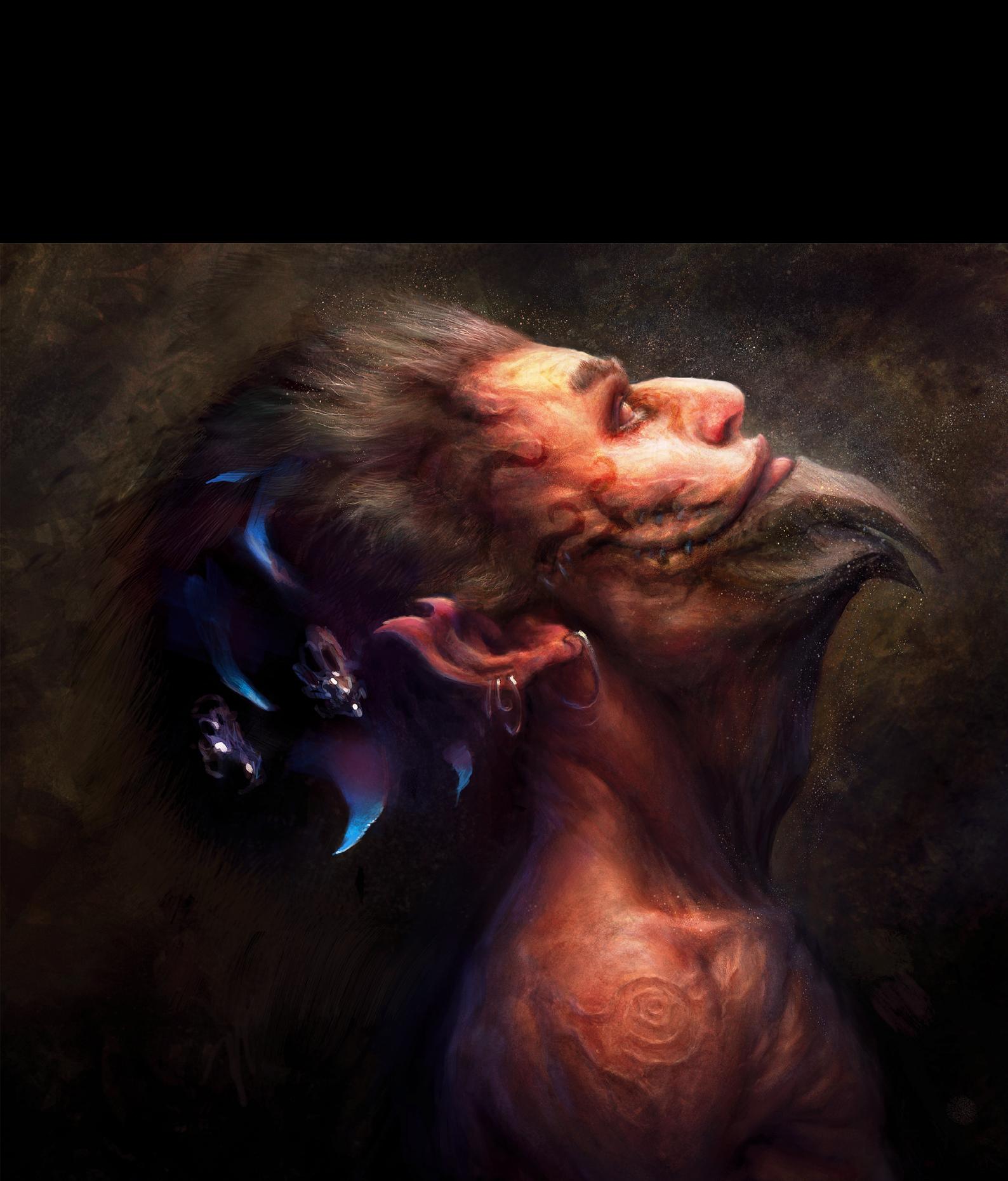
Awakening

Arnaud Valette

<http://www.arnaudvalette.com>

arnovalette@gmail.com

Arnaud
valette
09



The Breath On Your Neck

Branko Bistrovic

<http://branko.cgsoociety.org/gallery/>

bisvic@gmail.com



Spacesuit

Richard Anderson

<http://flaptrapsart.com/>

flaptraps@flaptrapsart.com

(Right)



Vampire Slayer

Randis

<http://www.hd-fortress.com>

contact@hd-fortress.com

© Randis Albion 2009



Secret Agent

David Smit

<http://www.davidsmit.com>

david@davidsmit.com





Royal Guard

Pao (Thitipong Jitmakusol)

<http://www.iampao.com>

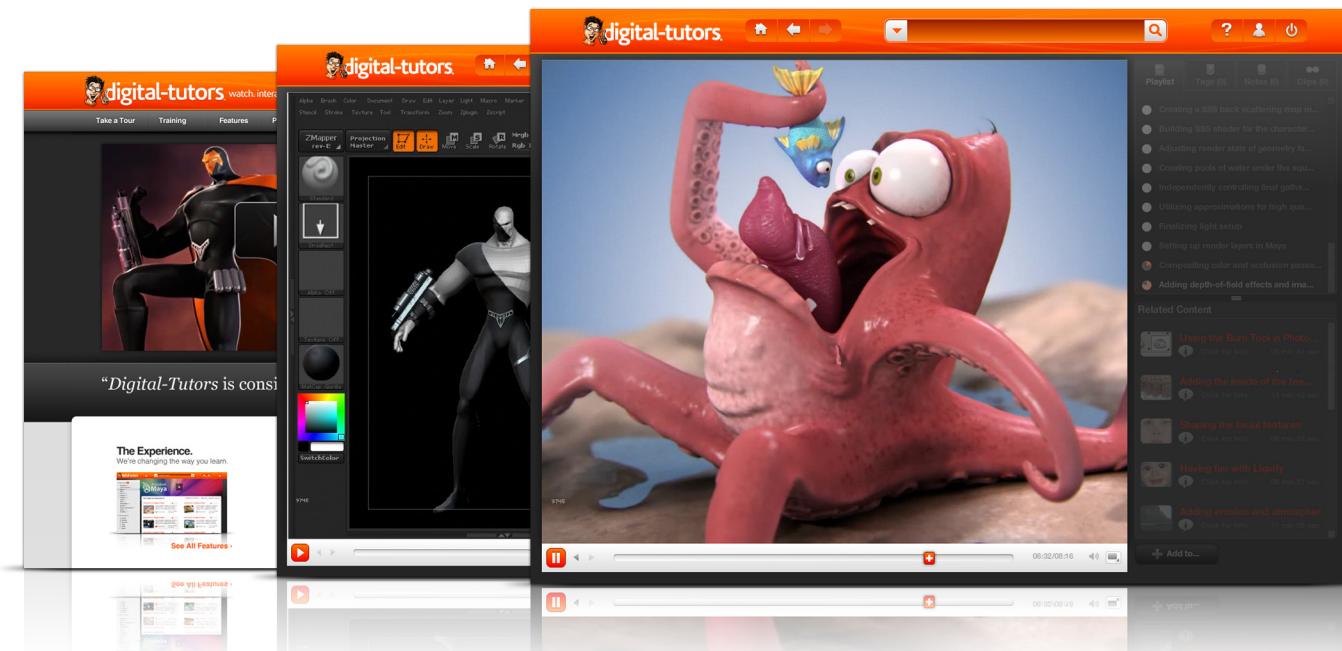
iampao@gmail.com





digital-tutors®

New Online Learning Library



Instant access to over 7,700 lessons.
★ Plus 12 all-new free titles!



**51 New
Titles!**

Start Learning for FREE Today!
Visit www.digitaltutors.com and sign up for
your free trial pass!

Autodesk®
Authorized Publisher



AUTHORIZED
Training Center



PIXAR's **RenderMan®**

**DOWNLOAD
RESOURCES**



- Free Brushes
- Free Base Image

“...by following along with the steps, you will be able to arrive at a similar visual conclusion and then get excited enough to extrapolate the lessons learned into your own pieces of artwork.”

USING 3D AS A BASE FOR 2D PAINTING

This tutorial series will revolve around the use of 3d as a starting point for digital painting. In particular we will explore the value of Google SketchUp, a free program enabling users to quickly build 3d environments using a set of intuitive tools.

This technique is used by many contemporary artists and is used as a quick and effective way of establishing correct perspective as well as offering a moveable camera in order to experiment with compositions.

As a 3d package SketchUp is easy to learn and does not require hours of training and as an artist wishing to draw complicated scenes, this approach can prove a valuable starting point for producing a template on which to paint over.

Using 3D as a Base for 2D Painting

Part 3:

Using Google SketchUp as a base for Digital Painting

Why use SketchUp?

Google SketchUp is a free programme enabling users to quickly and effectively build 3D environments using a number of intuitive tools. Unlike most 3D packages it is very easy to learn and does not require hours of training before decent results are achievable. It is very versatile and with regards to digital painting can prove an invaluable tool in swiftly establishing a correct perspective, as well as offering a moveable camera in order to experiment with alternative viewpoints and compositions.

An object can be made and then duplicated any number of times, so if a structural element is repeated throughout your concept then this package can quickly and accurately create such arrays. It also has a simple-to-use lighting system that enables placement of the sun according to the month and time of day by way of slider bars, thus determining physically correct shadows that can be turned on or off at the click of a button. These functions mean that as an artist wishing to draw detailed or tricky scenes, one can use SketchUp as a valuable starting point to establish a "guide template" on which to paint over.

Installation

In order to install SketchUp, click on the link below and go to Downloads on the left hand menu. Select the free version which is currently

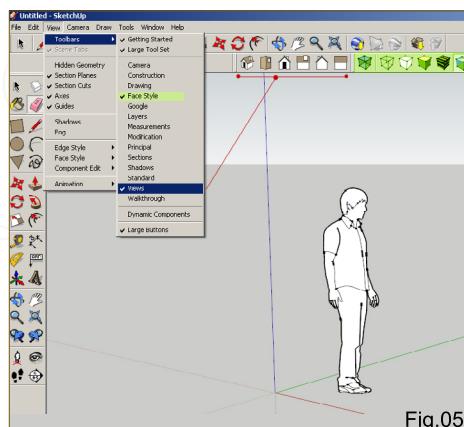


Fig.05

©2009 Google - [Google Home](#) - [About Google](#)

<http://sketchup.google.com/download/gsu.html>

Fig.01



Fig.02

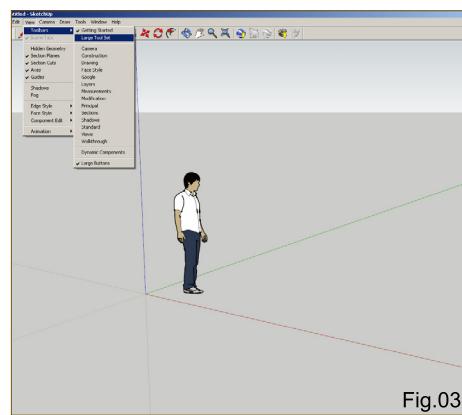


Fig.03

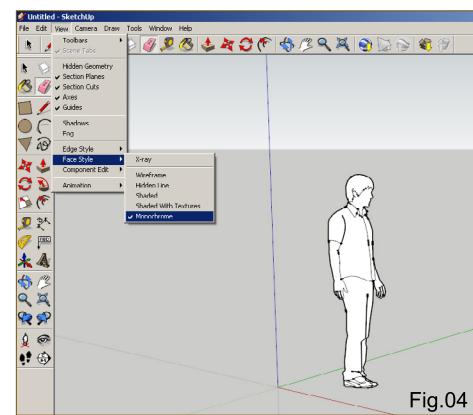


Fig.04

version 7 (Fig.01). Choose your operating system and then follow the instructions.

<http://sketchup.google.com/>

Once installed, click on the application shortcut and you will be prompted with the following dialogue box in which you are asked to choose a template (Fig.02). The scale and type of your scene will determine which you choose, but for the purposes of this tutorial we will select **Architectural Design – Feet and Inches**.

Toolbars & Menus

When SketchUp starts you will see a screen resembling Fig.03. From the main menu click on View > Toolbars > Large Tool Set; this will access more tools which will appear down the left margin. To change the display mode of the

objects in the scene click on View > Face Style; this will show a number of options, as seen in Fig.04.

If you also check Views under View > Toolbars you will see six small house icons appear below your toolbar (Fig.05). These will provide quick access to orthographic views, as well as isometric. You will notice that I have also checked Face Style in the list (highlighted in green), which has added some cube icons to represent the display modes.

This is basically where you can customise your workspace and add toolsets to speed up your workflow. For additional help go to Window > Instructor; this will open a window providing useful information on whichever tool you have currently selected.



Fig.06

Basic Navigation

The key orientation tools you will use to navigate in your scene are Orbit, Pan and Zoom, which you will find on the top toolbar and whose shortcut keys are represented by O (Orbit), H (Pan) and Z (zoom). These can be seen in Fig.06.

The main tools used to directly manipulate your objects are Move (M), Rotate (Q) and Scale (S). The Scale tool appears on the left hand toolbar which you will see highlighted if you press S on your keyboard.

Drawing Shapes

One way of using SketchUp is to create two-dimensional shapes from which you can extrude three-dimensional objects. Select the top view and then the Line tool (Fig.07) and left-click in the viewport to begin drawing. You will notice that as you do so, the points will snap to the

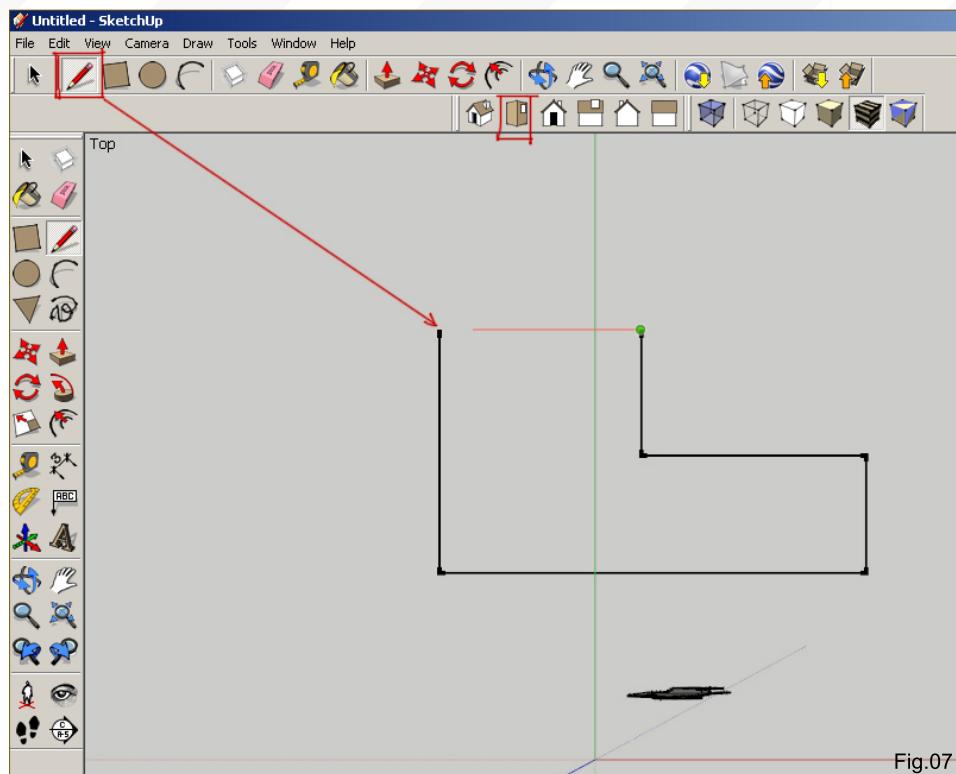


Fig.07

green and red axes, thus easily enabling the creation of right-angled structures.

When you finally close the shape by clicking on the initial point you will notice the shape turns blue, indicating a surface has been made; once a shape has become closed you can still edit

it, however. Using the Line tool, add an internal rectangle (see top diagram in Fig.08). To now make this edge become part of the exterior shape click on the Eraser tool and then on the outside edge shown in red.

You can continue to cut into your shape or alternatively extend it outwards and then erase the necessary lines by using the Line tool (Fig.09). Here I have added a walkway and also a curved section using the Arc tool. You can also draw more organic shapes using the Freehand tool (Fig.10).

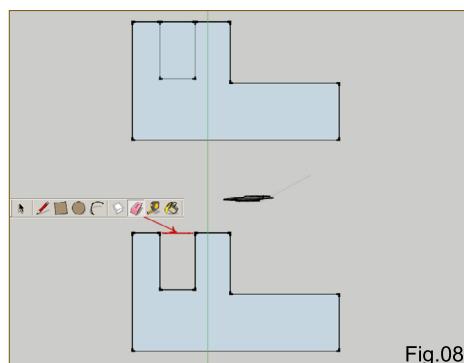


Fig.08

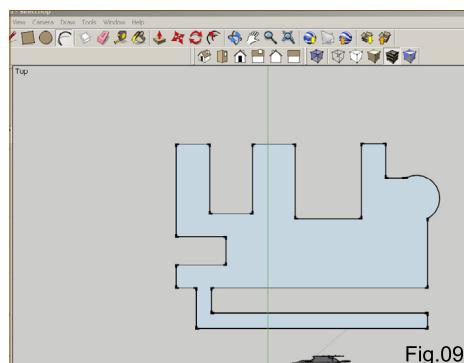


Fig.09

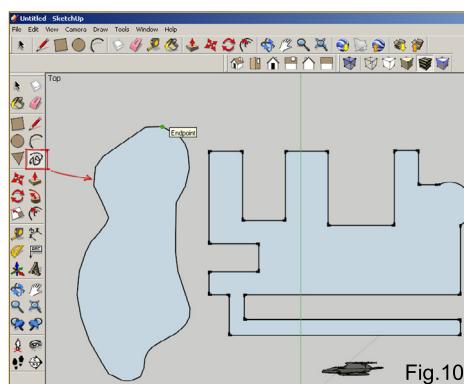


Fig.10

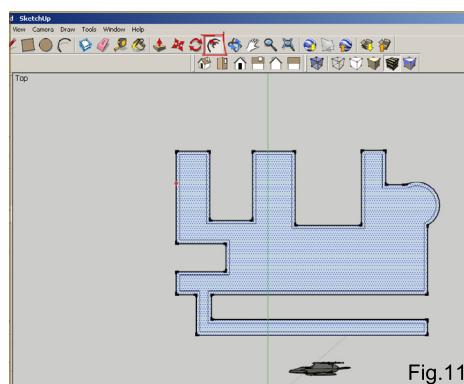


Fig.11

One other useful function, especially for architectural structures, is the Offset tool which is situated next to the Rotate tool. This enables a shape to be duplicated in order to create depth – perfect for drawing walls in a building, for example (Fig.11).

With an exterior wall depth, click on the large internal shape using the Select tool (black arrow on Toolbar) and hit delete. You can then select the Push/Pull tool and then click on the wall and raise it vertically (Fig.12). You will notice I have edited the section where the walkway adjoins

Using 3D as a Base for 2D Painting

Part 3:

2d
artist

the building using the Line and Eraser tools so that this was not raised along with the outer wall.

Three Dimensions

When a shape has been converted into 3D it can be edited further by using a combination of the Line and Push/Pull tools. If you move the Line tool along an edge it will snap to the midpoint between opposing edges (**Fig.13**). You can then make equally spaced cuts, as shown.

These new shapes can be pushed inward or pulled outward, or alternatively a new shape can be drawn and this can then be manipulated.

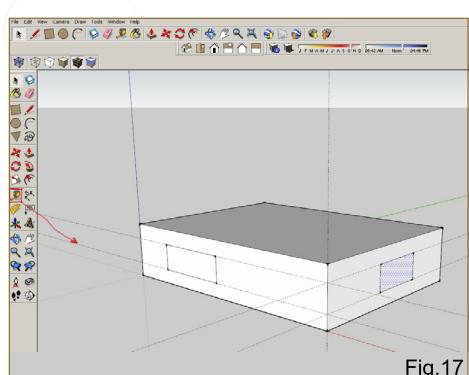
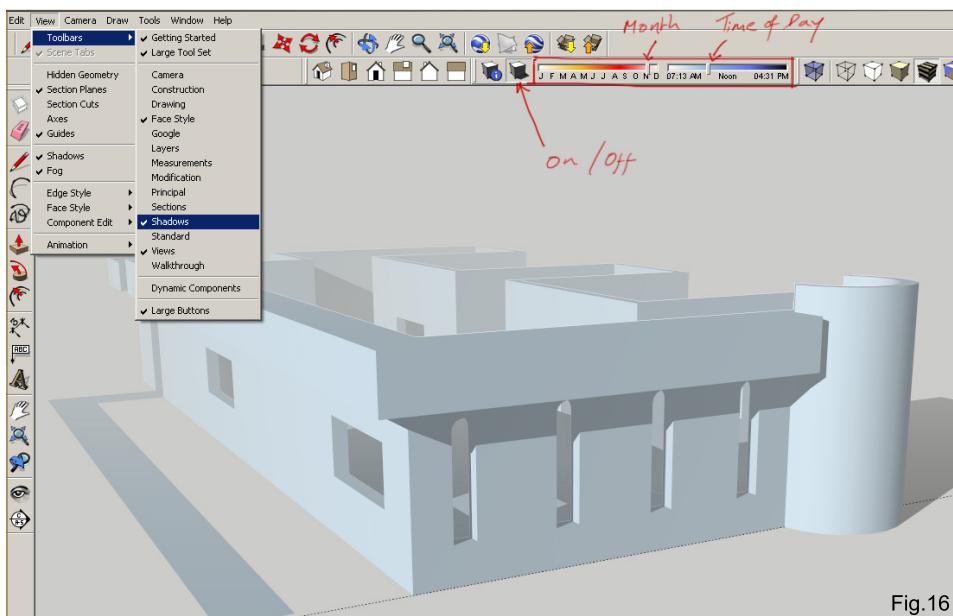
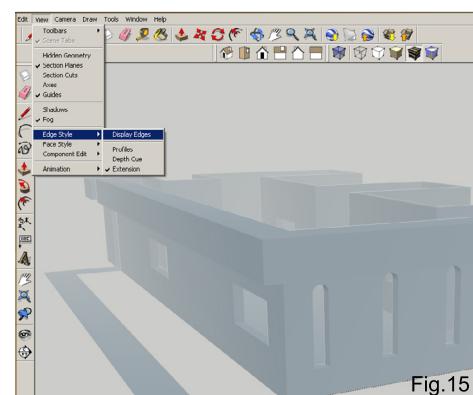
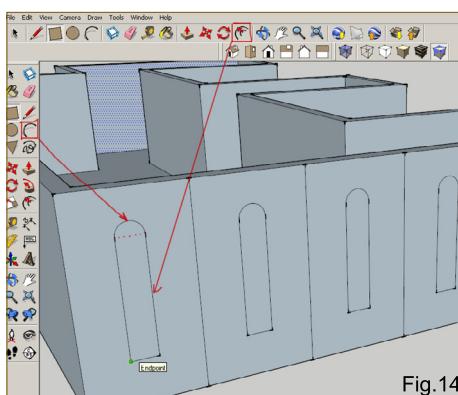
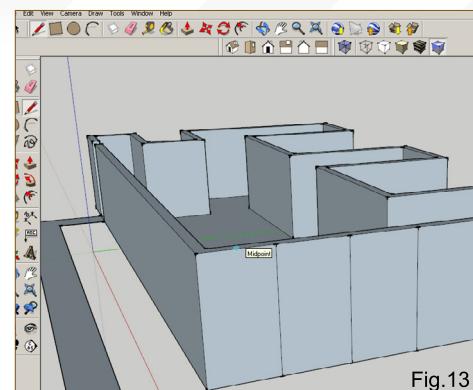
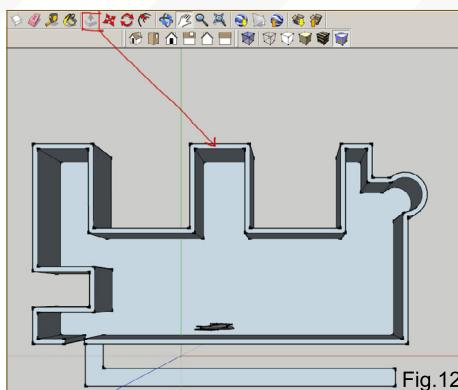
In **Fig.14** I have used the Offset tool to create a window shape in the far left rectangle. To create the same proportioned window in the other sections simply select the Offset tool and double-click in each rectangle. To create the arches use the Arc tool and then erase the horizontal join shown by the dotted line.

To create windows use the Push/Pull tool to move the shapes inwards beyond the inner wall surface or until they disappear.

Using a combination of the tools mentioned so far you will have the means through which to create and edit a wide range of forms and design detailed scenes.

Atmospherics & Lighting

You can add atmospheric perspective in the form of fog to your scene. Go to View and check Fog, as seen in **Fig.15**. You will notice that the edges on my building have also been switched off, which you can control in the menu under Edge Style > Display Edges.



To add lighting effects check Shadows which is above the Fog label, and to get more control over this function go to View > Toolbars > Shadows. This will place two slider bars on your toolbar which denote the month and time of day. By adjusting these you can control the position of the sun and direction of the shadows (**Fig.16**). There is a little icon to switch the lighting on or off, and besides this there is also another icon which opens up some extra parameters that

alter the tonal range of the shading. You can also control whether this affects just the object itself or the ground along with it and vice versa.

Additional Tools

A few other useful tools worth mentioning are the Tape Measure, Protractor and Dimension. The Tape Measure is used to draw guidelines which can then be traced over with the Line tool. In **Fig.17** you can see that the tape measure

has created the dotted lines which can be used as a guide to draw the windows an equal distance from the top and bottom of the block. To delete the lines simply use the Eraser tool. The Protractor is used to create accurate angles. Move the tool to the point at which you wish to start the angle and you will see how it snaps to the three axes. Click to establish the correct plane and then click to begin the angle along the appropriate edge. Now you can set the angle using the guideline. In Fig.18 I have used the near corner as the starting point, which I will mirror on the opposite corner.

Once the guidelines are drawn, trace them using the Line tool, as with the Tape Measure. In Fig.19 you can see that the two angles have been drawn and then the Push/Pull tool was used to extrude a roof shape across the base block.

The Dimension tool simply adds a label to your scene, showing the distance between two points. Click and drag from A to B and then drag up or down to set your dimensions, once again using the Eraser tool to delete when necessary (Fig.20).

Cameras

The camera in SketchUp is initially placed at an average eye level height, so for example when you click on the Position Camera tool it will zoom in and appear around head height from the ground. In this sense scale is an important factor in your scene.

In Fig.21 you can see a cross where I intend to position the camera, after which the viewpoint will resemble the inset image. The character has been placed in the scene to demonstrate the relationship between the scale of a character and the initial camera height. To adjust your camera, use the Look Around tool represented by the eye icon.

One final tool which may prove useful is the Section Plane tool which allows a view of a

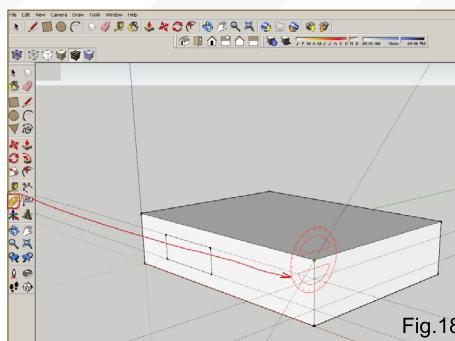


Fig.18

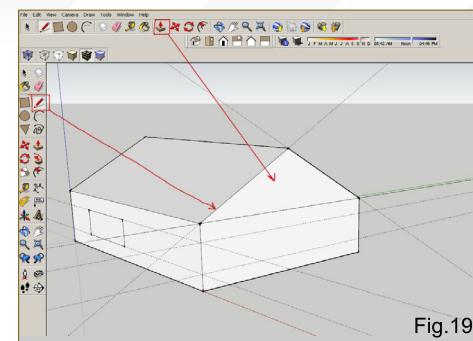


Fig.19

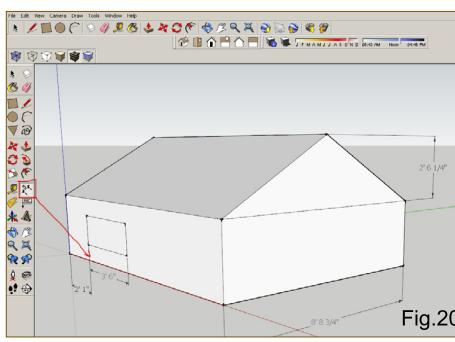


Fig.20

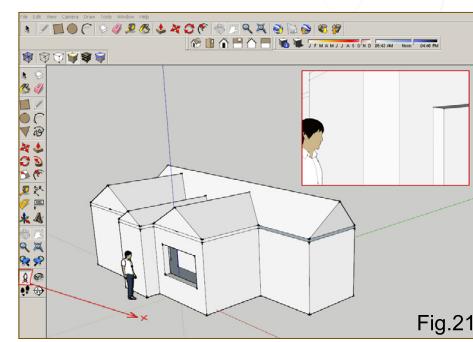


Fig.21

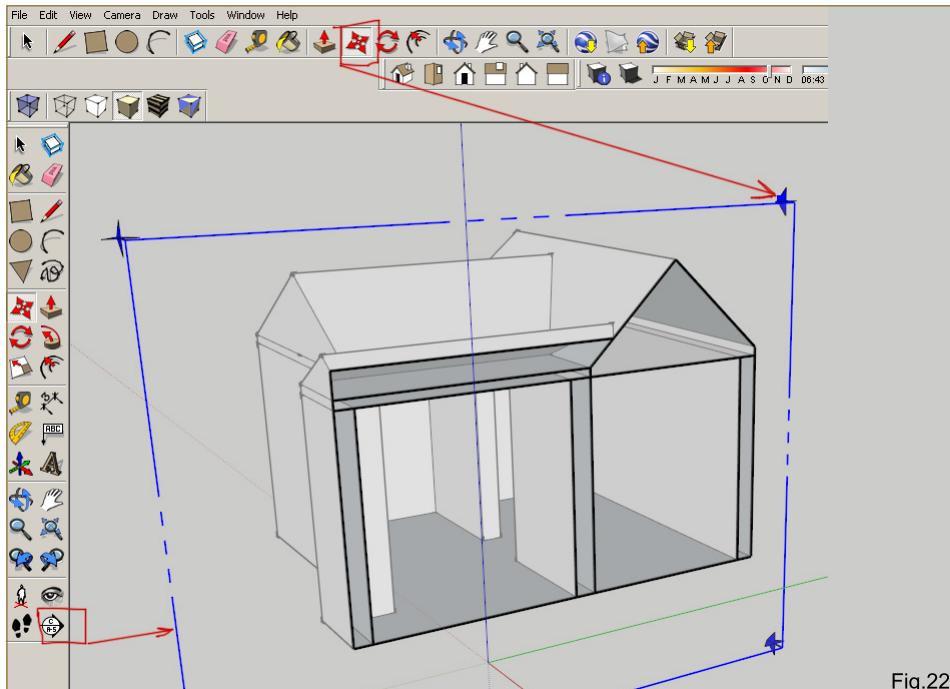


Fig.22

cross-section of your object. To use this click on the tool and then align the green icon to the corresponding plane or angle you wish to view. Then select the Move tool and click on one of the corner arrows and drag in the relevant direction (Fig.22).

This concludes our overview which I hope has at least introduced the main tools and their functions. There are of course further lessons to learn along with other tools and techniques,

such as applying materials, but the main aim here is to introduce the interface and value of the software in terms of building a simple 3D environment which can then be used in digital painting.

Richard Tilbury

For more from this artist visit:

<http://www.richardtilburyart.com/>

Or contact them at:

rich@3dtotal.com



Using 3D as a base for 2D Painting

Software Used: Google SketchUp and Photoshop

Introduction

Designing environments in a three-dimensional space incorporating lighting cues, mood, and spatially representing objects in relation to one another are important skills in allowing the art department leads to make decisions early. Understanding perspective and volume in three dimensions are essential to being able to successfully undertake such a task, but it may not always be desirable to start from scratch – establishing the horizon lines, plotting the vanishing points and then constructing the objects in relation to these constraints.

As in any production environment, time is of the essence, and this directly translates to the expenses associated with a project and additionally increases lead times on making decisions. So taking advantage of any techniques or skills which can expedite the process is very valuable to those involved. This is where using a program such as Google's free software, SketchUp can help: it allows objects to be blocked out quickly and efficiently, convergence is automatically taken care of, rapid prototyping of various object placements can be undertaken, and complex repeating elements can be duplicated in a split second.

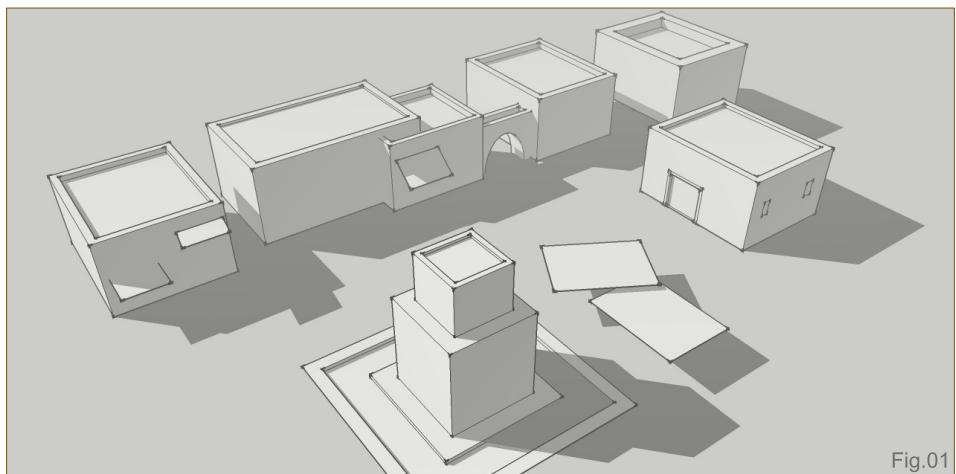


Fig.01

Therein lays the crux of this tutorial – that is to undertake basic scene design, similar to that in film or game pre-production, leveraging the flexibility and rapidity of using a 3D modeling package.

The scene I am looking to create is an area set within a third world country, late in the afternoon, lending itself to long cool shadows and warm object colors. Due to the setting, the piece will necessarily include the use of texturing to bring a visceral feel to the world, and I'll be using a lot of earthy colors and an execution that will be quite painterly with an abundance of application strokes. This is in stark juxtaposition to sharp clean lines, which is an inherent pitfall when painting over perfectly rendered polygon edges.

My focus is to impart procedure and technique that will be applicable across all manner of subject matter and era, not necessarily to wow

you with the final image. My conservative hope is that by following along with the steps, you will be able to arrive at a similar visual conclusion and then get excited enough to extrapolate the lessons learned into your own pieces of artwork.

So without further ado, let's get on with the show!

Step 1

Here we can see the initial base geometry as created in Google SketchUp (Fig.01). As you can see it is all very rudimentary, although I have turned on the shadowing (View > Toolbar > Shadows > Display Shadows) as I find it is one of the more tedious things to illustrate manually.

Keeping the geometry simple is a conscious decision which necessarily requires me to add in the detail work by hand, rather than slaving

over the 3D base geometry for hours. I have found that spending inordinate amounts of time on the modeling beholds me to the base geometry far too much, and I unconsciously don't want to lose a lot of the details that I have already modeled, regardless of whether they are working to enhance or detract from the image.

As a general rule I spend as much time as I need to block in the major shapes, but as little time as possible. To illustrate, this work done in SketchUp took approximately 10 minutes.

Step 2

When the base modeling has been created, I bring up the Styles dialogue box (Window > Styles) which allows me to alter the style from the generic SketchUp modeling style into something that will help my painterly style later on. In this case, I choose the PSO Cursive style, which adds a background texture resembling that of pencil texture on paper, and the lines also look like ruled graphite (**Fig.02**). Overall, it looks less computer generated and will help in the rendering of the image.

Once this step has been done, I export the image as a JPEG (File > Export > 2D Graphic) and save the SketchUp source file in case I need it later on.

Import your JPEG file into your illustration software of choice – I use Photoshop – and ensure you're happy with the dimensions you're working with.

Step 3

My first step in all perspective based works is to immediately draw up, on a separate layer, any

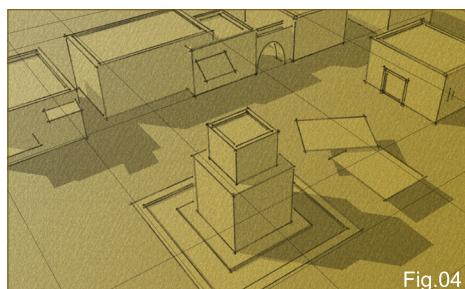


Fig.04

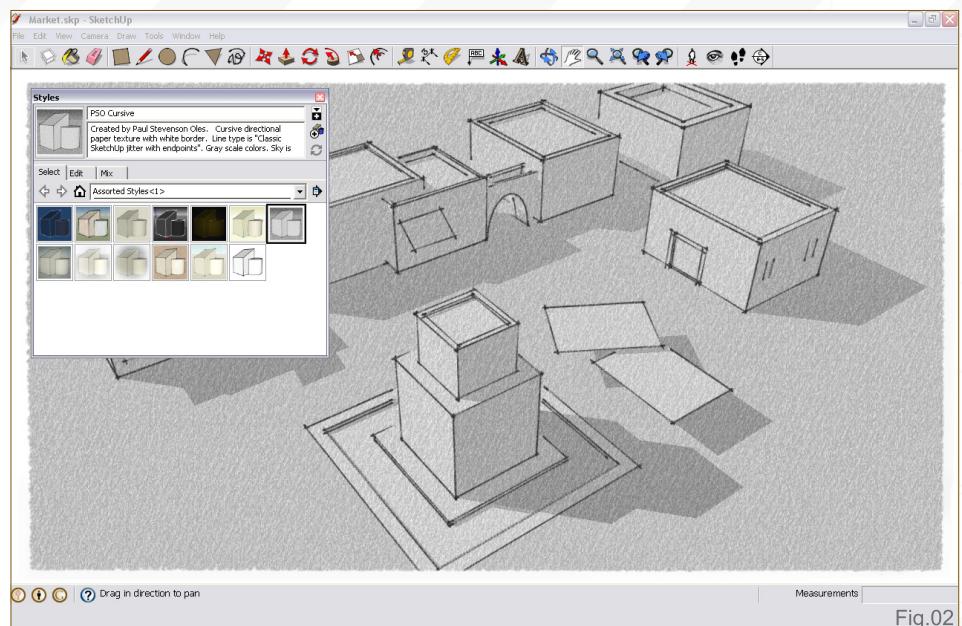


Fig.02

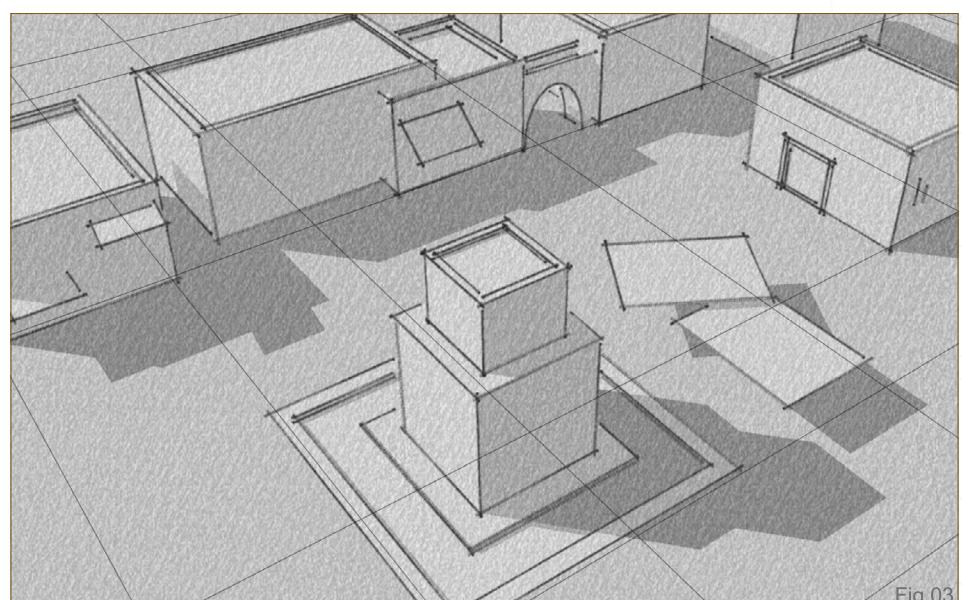


Fig.03

convergence lines based upon existing parallel lines within the image (**Fig.03**).

The reasons they are important, especially if there is no visible horizon line (such as in this image) is that you have a tangible idea of how the geometry is spaced according to one another, and also to act as useful guides for any hand drawn elements or textures that also need to tend towards pre-existing convergence points.

Step 4

The next step is to decide what underlying color the image should have. In this case I've decided

on an earthy or sandy colored ground, and I've used a slight gradient applied to a separate layer, with the layer blending mode set to Multiply (**Fig.04**).

It's important to note which way the predominant light is coming from so that the gradients can reflect this. I chose a sun position that is coming from the upper left of the image, which also has a low angle over the horizon which will lend to some long shadows that can be used to cast over the foreground objects, providing unity, describing form and allowing for a more dramatic composition.

Using 3D as a Base for 2D Painting

Part 3:

2d
artist

Step 5

I choose to texture the ground early on; I see it as a relatively unchanging element throughout the image, so establishing some basis of what everything else is built on is a logical first step for me.

This is the base texture I've decided to use (**Fig.05**). I did a quick search on Google, and for the purpose of quickly texturing something this is quite sufficient – yes, it has repeating elements, and no it is not a perfectly tileable element, but a lot of these imperfections can be removed very rapidly by painting them out.



Texture source:

http://developer.valvesoftware.com/wiki/Rock_Textures_Creation

Fig.05

Step 6

Create a duplicate of the texture (Layer > New > Layer via Copy) (or Ctrl + J), and hide it so you can reuse it later.

Using the duplicated layer, perform a Free Transform to place the texture into perspective. This can be done by going to Edit > Free Transform (or Ctrl + T) and holding the Ctrl key while dragging a control handle.

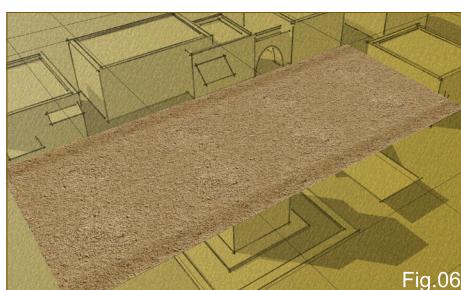


Fig.06



Fig.07

have effectively textured part of the image in 3D space.

so we necessarily need to start cutting out segments of the texture image.

Step 7

Obviously it would not do for the texture to be intersecting with the other foreground elements,

In order to do this, reduce the Opacity of the texture layer to 30% so you can see the underlying objects, and then, using the Polygonal Lasso Tool (Click and hold on Lasso Tool in the tools palette and then select the Polygonal Lasso Tool), select the areas to be cut out. Once you are happy with the selection, hit the Delete button (**Fig.07**).



Fig.08

Step 8

In order to take advantage of the underlying colors of the image, the layer needs to be set to an alternative blending mode, so choose the Screen mode.

You will notice that the texture lightens the ground (**Fig.08**). For now, this is fine; your aim here is just to apply some texture to the ground which helps in the illusion of a receding ground that is converging into the distance.

Step 9

Using the preceding four steps, you can now complete the texturing for the entire ground plane (Fig.09).

Step 10

We are looking to achieve a painterly rendering style in this piece. As a result, a helpful step I often include when I am working in this style is creating the rough application of paint with a custom made palette knife type brush that I use for this task (free for download with this article – just click on the **Free Brushes** icon) (Fig.10).

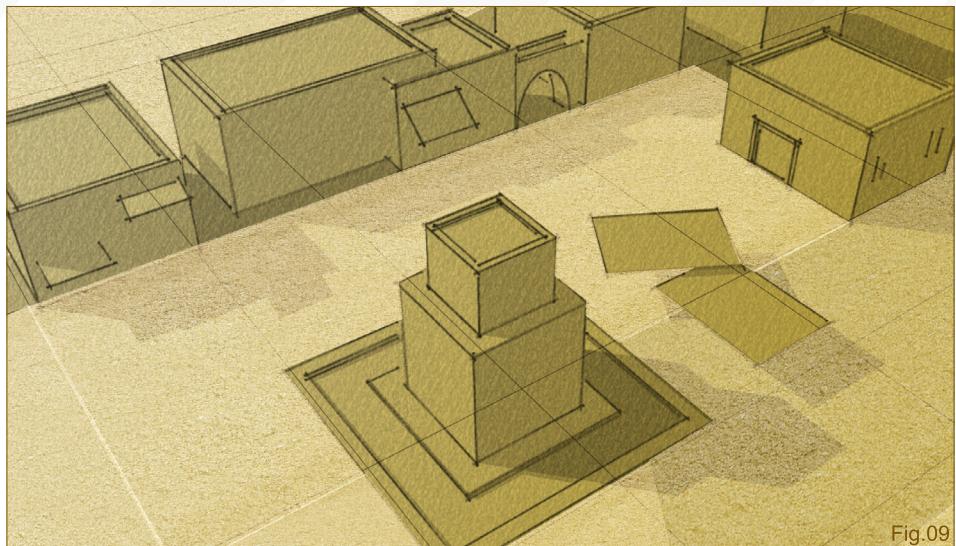


Fig.09

This helps to break up continuous and uniform color with textured strokes, and also works to reduce the adherence to the perfectly straight lines from the 3D render. I pay particular attention to the walls, where I consciously bough and roughen up the edges to allude years of wear and tear by the elements.

I also start to rough in some color here, making sure I keep the saturation of these colors low.

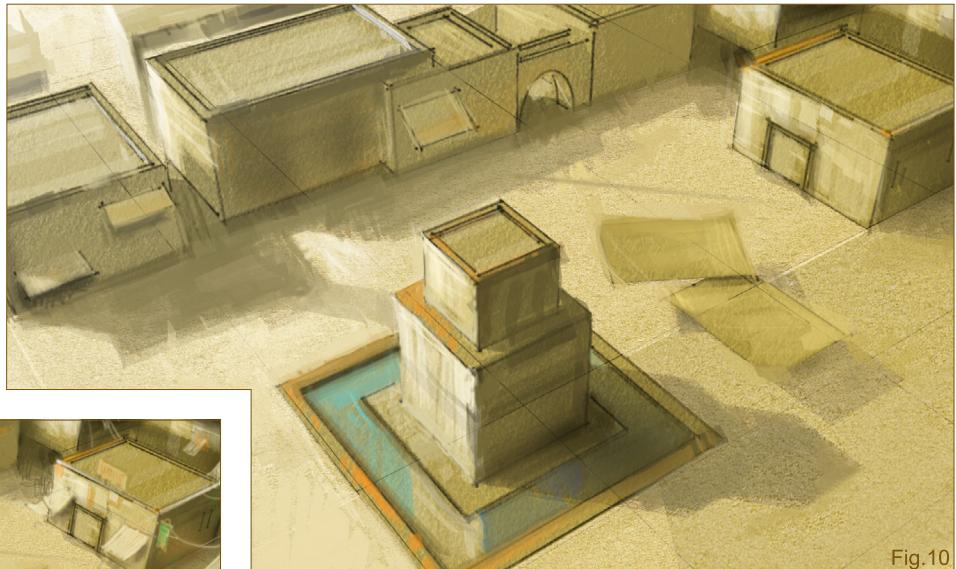


Fig.10



Fig.11

Step 11

At this stage, I want to start adding in the semblance of detail, alluding to things such as signs, shadows being cast from elements outside of the visual extremities of the image, and shade cloth over windows.

I use a soft edged brush for this task (Fig.11). I tend to use Airbrush Soft Round for general purposes when I have no pressing need for other effects – it's a fast brush, good for approximating form.

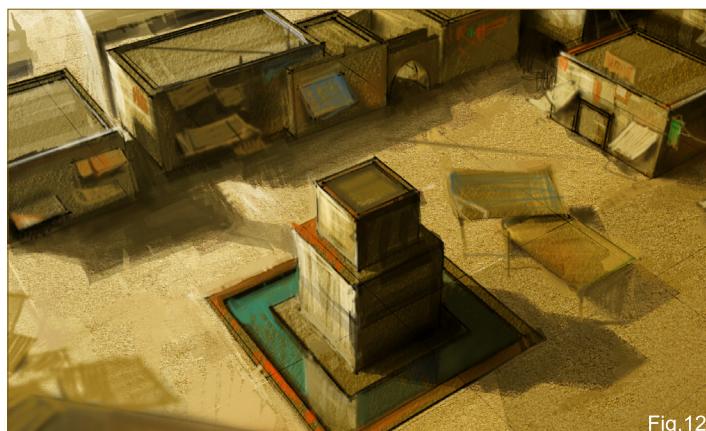


Fig.12

Step 12

When I am happy with the image's overall composition, I then create a duplicate summary layer.

A duplicate summary layer is essentially a layer above all other layers that is created if you flatten all the prior layers and then create a duplicate of that layer. I do this as a way of shifting my tonal range into something a little darker (Fig.12).

Using 3D as a Base for 2D Painting

Part 3:

2d
artist



Fig.13

In order to do this, all you need to do is use the command, Ctrl + Alt + Shift + E.

Once this is done, set the layer blend mode to Multiply and Opacity to 100% – you will notice the image darkens quite considerably. The reasoning behind this is that your lighter colors will have more “punch” to them when you start working them back into your image.

Step 13

This step focuses on increasing the depth of the shadows; alluding to some ambient occlusion around the base of objects and working in some slight vignette effect towards the outer extremities are the main areas of focus (Fig.13). Using the Airbrush Soft Round suffices for these tasks.



Fig.14

Step 14

Next is another iterative pass at adding in more detail to fill up those areas which seem a little sparse, punch up some of the colors, and to work in some lighter color around the top of the central structure to create a bit more contrast in order to draw the eye (Fig.14).



Step 15

Still adding in more detail here, I'm concentrating on filling in the colors of the shade cloth and adding miscellaneous objects underneath some of the covering, placing various pipes on the tops of buildings to break up their silhouette (Fig.15).

Step 16

I feel the image needs the focal point to be made more apparent, so I again refer to creating a duplicate summary layer and setting it to Multiply. Erase the lighter side of the building and around the lighter parts of the ground, to show that the light is being cast strongly from the left (Fig.16).



Fig.16

Step 17

This is another iterative detail adding step now. I take care to balance where I am placing the objects; I like to work the image up as a whole, rather than working on any one individual area at a time (Fig.17).

A major addition is the slanted roof on the middle structure, not because of any requirement other than I think it makes the viewer ask, "Where on earth is this place?!" Plus it also looks kind of cool.

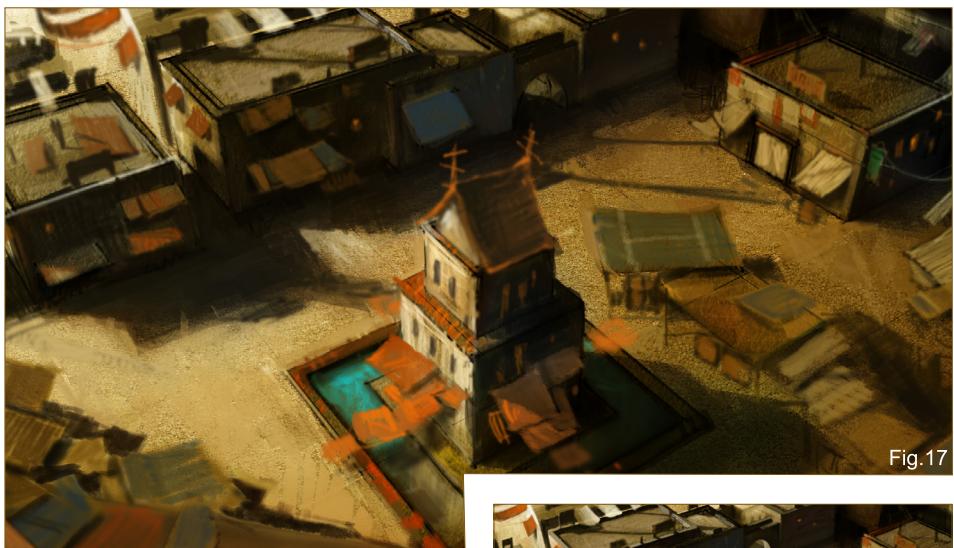


Fig.17

Step 18

At this stage, I am comfortable enough with how the image is coming along to start sharpening up the details on the central structure and the surrounding areas, like the tops of buildings and the cloth coverings (Fig.18).



Fig.18



Texture source: www.mayang.com/textures



Fig.19

This is essentially a process of zooming in and using a much smaller Chalk brush to work in the details. When you zoom back out to the regular viewing size, the image will be much clearer and sharper.

Step 19

I feel that the ground needs an extra level of detail here; some extra texturing that will sell the surface as dry, cracking ground. So I do a quick search on Google and end up with the texture as displayed in Fig.19.

Using 3D as a Base for 2D Painting

Part 3:

Again, I realize that there are repeating elements and the tiling is very noticeable, but for the purpose required, it is perfectly acceptable.

In order to use the correct scale, I shrink the texture to half the original size and duplicate it to create a quadrant.

Step 20

On the basis of steps 6 and 7, I place the texture onto the ground plane and work them in by erasing where necessary, desaturating the color (it's the texture information I want, not the color) and changing the layer blending mode to Overlay.



You can see from this simple step that it adds a lot to the surface of the image (**Fig.20**).

image – such as the harsh shadowing at the lower left extremities of the debris and junk.

Step 21 – Final

In finishing off, I replicate a few steps from earlier on, such as adding some brick textures to some of the walls, adding corrugated iron to some slabs of color, and painting over some areas which I deemed intrusive to the final

Conclusion

Although I'd still consider this image a work in progress ripe for more refinement, for the purposes of this tutorial I have covered all the essential steps required to create an environmental concept built upon a 3D base.

In all, once you get comfortable with the process, you can typically finish one of these in around 4 hours – it is then up to the art director to determine the level of finish they want.

Darren Yeow

For more from this artist contact them at:
darren@stylus-monkey.com



**DOWNLOAD
RESOURCES** 

- Free Brushes
- Free Base Image



• Free Brushes

“...start a whole folder on your computer of hand-painted patterns that you can adjust or modify as you please, when you please. The possibilities are truly endless...”

CUSTOM BRUSHES

An artist's brushes have always been a vital part of any painter's set of tools, and remain the single asset that links paint with canvas. As such, they are crucial to how we view and interpret an artwork, and they afford the artist with a means through which to convey an idea or feeling. This has always been true throughout the history of art, and is no less important within a digital context. Software such as Photoshop and Painter essentially combine and fuse paint, canvas and brushes into a single tool. However, within this complex set of “tools”, brushes retain certain autonomy with their own, distinct set of parameters and presets, offering artists the freedom to affect and vary the way paint is applied. This principle of customizing brushes forms the focus of this set of tutorials, and aims to show how individual artists exploit these techniques to achieve some interesting results!

Custom Brushes: Fabrics & Lace

Software Used: Photoshop

Introduction

Seeing realistically painted fabrics and material embellishment is always awe-inspiring. We wonder how an artist achieved it, managing to apply such amounts of details and textures without going insane in the process – those of us who've tried to do it all one stroke at a time have certainly had our brush with insanity (excuse the pun!). Yes, it is manageable, but intensely time-consuming aside from anything else.

This is where custom brushes come to the rescue.

To use custom brushes for fabrics, embroidery and lace embellishments is not quite as simple as it may seem at first glance, and still requires some time to get right, but it is a lot less aggravating than having to do it all by hand.

Are you curious to see how it works? Then just keep reading!

Painting Realistic Fabrics & Embellishments

Let's assume you have painted a wonderful picture with someone wearing a beautiful ball gown, or maybe a pirate in 17th Century thrown-together garb, or a beggar in torn cotton rags ... Maybe you want to paint a dancer clad in nothing but net and lace, or design a wedding dress that will make jaws drop? The picture is there, but the details are missing to distinguish between cotton and silk, lace and net, wool and



Fig.01



Fig.02

linen, or give the garments that extra little kick with extensive embroidery or exquisite brocade.

You've been looking at photos to give you inspiration, you have been to textile shops to look at the real deal, and even raided your own wardrobe to see what certain fabrics look like, but you still find it hard to paint it all. Well, you've been to all the right places. You just forgot to utilize what you saw. Go back to the textile store and buy a small piece of this and that lace you liked, download the free embroidery patterns you saw online, get a fashion and fabrics book from the library (not for direct copying though, since even though the fabrics are not copyrighted, the photos of them are), and go back to your own wardrobe (or that of a friend or relative) and pick out the pieces that hold something of interest – maybe a piece of lace underwear or net stockings, some torn jeans, a chunky knit top or a dress with some nice flower prints on it. And now you're good to go!

Single Pattern

Let's start with something simple: a single item to turn into a brush. Here's a photo of a T-shirt of mine that has a nice flower print on it (Fig.01). You can see how I made sure that the piece was lying flat, and that I tried to photograph it straight from above. That way, we eliminate any kind of skewed angles and have as few creases as possible, in efforts to avoid the problems they may cause later on.

The first thing we want to do when we open the photo in Photoshop is to desaturate it by going

to Image > Adjustments > Desaturate, unless of course the image was taken in black and white, like mine. It will be easier this way to optimize the image before turning it into a brush. Some colors turn grayscale better than others – the ones of my T-shirt were unfortunately not some of them.

To turn just the flower into a brush, we need to get rid of the T-shirt surround – Photoshop brushes will use anything that is not white, so if we were to turn this current image into a brush, we'd get everything we see in it right now. So we need to get rid of everything but the piece we want to keep. Adjusting the Levels of the photo – Image > Adjustments > Levels – helps to get the desired results, making sure that the surroundings get as pure white as possible, while the flower remains nice and dark but not too over-saturated (Fig.02). Too much contrast here can make the image look very scraggly and too sharp around the corners, which is not very desirable.

We can now crop the image with the Cropping Tool, trying to get as close to the edges of the flower as possible without touching them. We can also adjust the crop rotation if we want to – sometimes it just works better (Fig.03). Now that is done, we can adjust the picture some more, if necessary. There may still be some grayish tones where there should be white, and we need to get rid of those.

We can either do this with the Paintbrush – a simple Hard Round one is usually the best



Fig.03



Fig.04



Fig.05

option here, with Opacity set to Pen Pressure and color to white – or the Eraser Tool (with the same settings). When using the Eraser Tool, we need to make sure that our active Background Color is white. We then carefully paint over or erase the bits that need to go (**Fig.04**). Take your time with this, as you want it to be as perfect as you can get it! Leaving a bit of light gray stippling around the immediate edges of the flower is okay; it actually works a lot better that way once we use it in a painting, as it won't look all too "cut out".

Sometimes it can be easier to invert the image's colors (Image > Adjustments > Invert) so everything that was white will be black, and vice versa, as it is easier to see that way where there's still some grey areas in the black, than in white. All you need to do before turning the image into a brush later is invert it again to its

original colors. And should you work with the Eraser Tool, make sure your active Background Color is of course black, not white.

Essentially, we are now done, but if you feel that the image could use a little more contrast, adjust it once more using Levels. You can also use the Burn Tool with the Mode set to Midtones to bring out some of the dark areas a bit more (**Fig.05**).

Now the image is ready to be turned into a brush. Depending on the size of the image, you may have to resize it to be able to turn it into a brush. In Photoshop CS, the brush size limit is 2500 pixels on either side (Image > Image Size).

Simply go to Edit > Define Brush Preset, give your brush a name if you like – and you're done (**Fig.06 – 07**). This kind of brush is useful for creating stand-alone embellishments on fabrics,

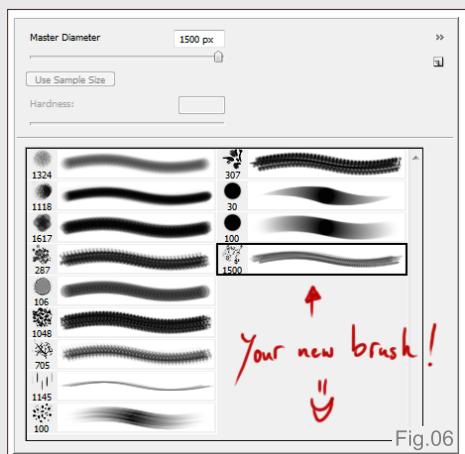


Fig.06

as well as non-continuous repeat patterns. You can create lots of brushes like this from photos or scanned items. The brushes will stay in your Brushes Palette until you change your Brush Set, and then Photoshop will ask you if you would like to save the changes made to the current set. You can also create a completely new set with your own brushes, by deleting all the brushes in your current set and then creating new brushes. All you need to do then is to Save the brushes (click that little arrow in the top right of your Brushes Palette to get the option).

Seamless Pattern

Let's move onto something a little trickier: a seamless brush; one that, when used, creates a continuous pattern. These can be anything from knitted fabrics to lace borders.

We start pretty much the same way as we did with the previous brush, by scanning or photographing a piece of fabric or clothing. Here we need to make absolutely sure the piece is laid out straight, and that we capture it dead-



Fig.07

on from above. No odd angles. Also, we need to make sure to capture enough of it, so the pattern can be "stitched" together without any all too obvious seams later.

I photographed a section of cotton lace border (**Fig.08**) that I'd like to use. As the border itself is white, I put it on a black piece of fabric (you could use anything, as long as it's dark) to get the best contrast. We desaturate as before and then invert the colors (**Fig.09**). This is necessary this time round because we want the lace to be the brush, not the surroundings. Some adjustments in the Levels may be needed, as before, so work your magic!

The next important step is cropping the image. We need to make absolutely sure that we know where the pattern starts and ends, so that we can crop it right at that point. If it is a tiny repeat pattern, as in this case, we can choose a larger section to make it less obvious that it's been stitched together later on when used. The more variation the better, as it makes it look much more believable (**Fig.10**).

When cropping, it may become more apparent that the pattern isn't perfectly straight – like in

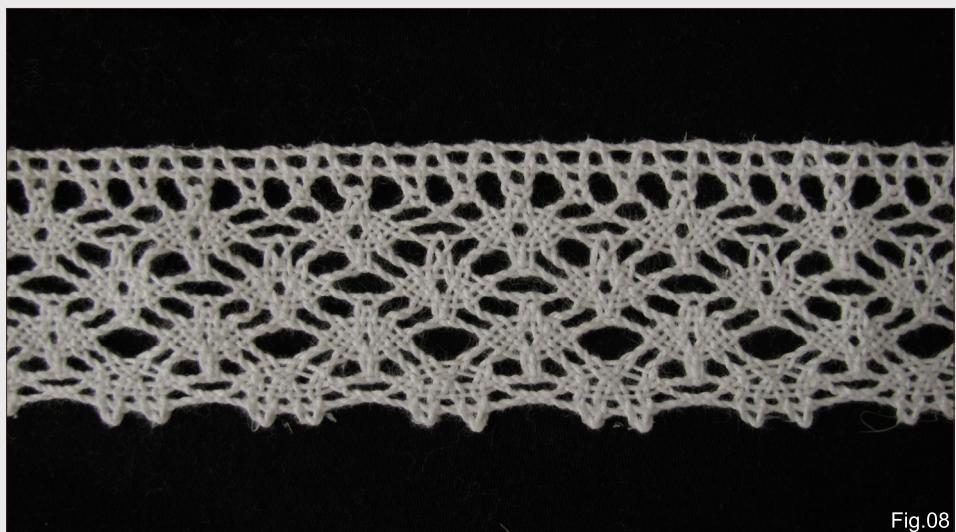


Fig.08

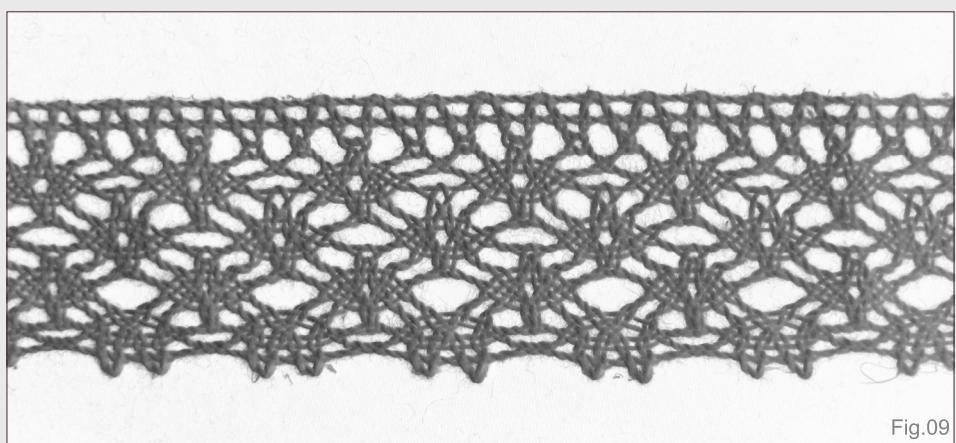


Fig.09

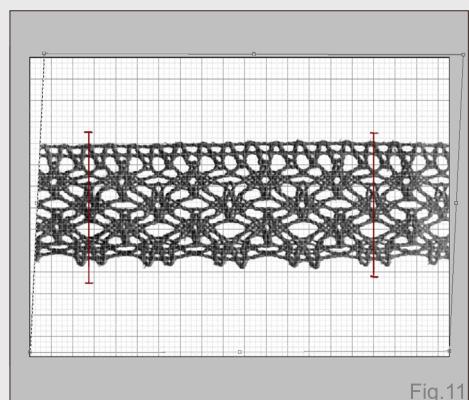


Fig.11

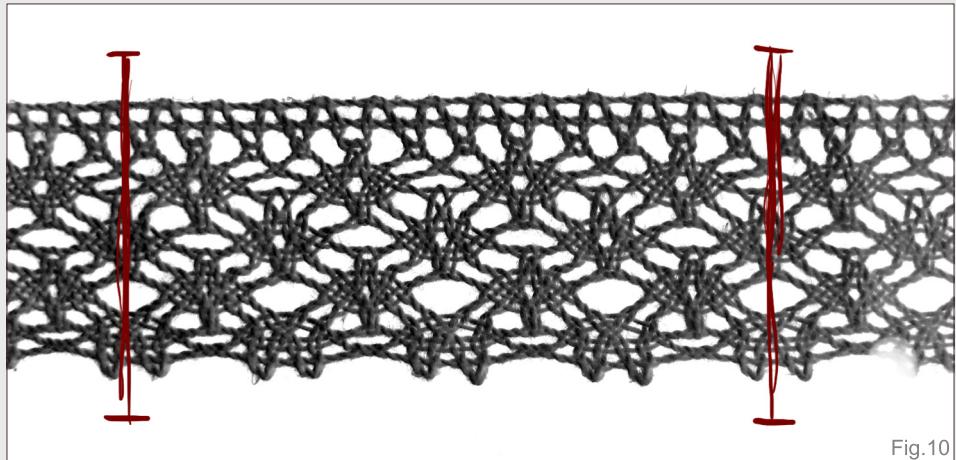


Fig.10

this case. To rectify that, we need to transform it a bit to get it straight. If we don't do this, it will not align properly later.

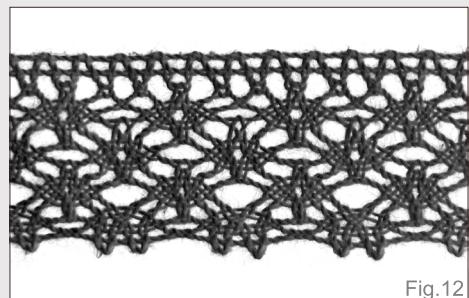


Fig.12

First, we may want to show the Grid, to get an idea of where the lines need to be (**View > Show > Grid**). We then select the canvas (**Select > All**), and then go to **Edit > Transform > Skew**. This will let us straighten the horizontals and

verticals out, as well as squish them to make them line up better (**Fig.11**). Once we are done with this, we can crop the pattern (**Fig.12**).

We now proceed as before with making a new brush, and once we've done this we need to adjust it to indeed create a seamless pattern: We open a new canvas and select the brush. We then open the Brush Presets palette

(Fig.13). Click on Brush Tip Shape at the top of the list on the left. You'll see lots of options there, but the one we need to pay attention to is the Spacing (Fig.13a). Moving the slider to the right spaces the brush out more and more. Move it until you can see the segments touching each other, instead of overlapping one another. Try the brush on an empty canvas, as the preview isn't quite that accurate. If there's a gap between the segments, or they still overlap, fine-tune the Spacing manually by increasing or decreasing the percentage. Once you're happy with it, create a new brush preset from the existing one so you don't have to do adjust it every time you want to use the brush (Fig.13b).

This kind of brush is useful for large surface texture or embellishment, like lace and embroidery borders.

By the way, if you cannot tell if a brush is aligned right because your straight line drawing ability is a bit under the weather – like mine – just press and hold the Shift key on your keyboard while you draw the line – it will automatically be straight.

Hand Painted Patterns

Of course, we can also paint patterns by hand, or even make small brushes such as (dotted, dashed or solid) circles, swirls, zigzags, or whatever you can think of that will help with painting patterns by hand. I usually like to paint all my patterns, no matter what they are, and then use them as brushes, rather than photographing actual items. Painting and designing your own patterns really gives you endless freedom.

The method for creating a brush for these is the same as the two previously described, depending on whether you want a seamless pattern or a stand-alone/repeat one.

Using Fabric Brushes

Download the Free Brushes with this tutorial and we'll have a look at how to best use the main brushes in the set. You will notice when you open it in Photoshop that I've already adjusted the settings of the brushes so they work as they should, but that shouldn't stop you from playing around with them.



Fig.13

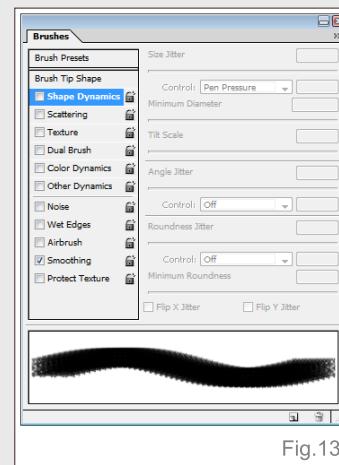


Fig.13

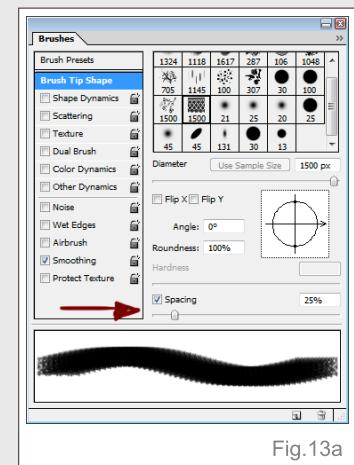


Fig.13a

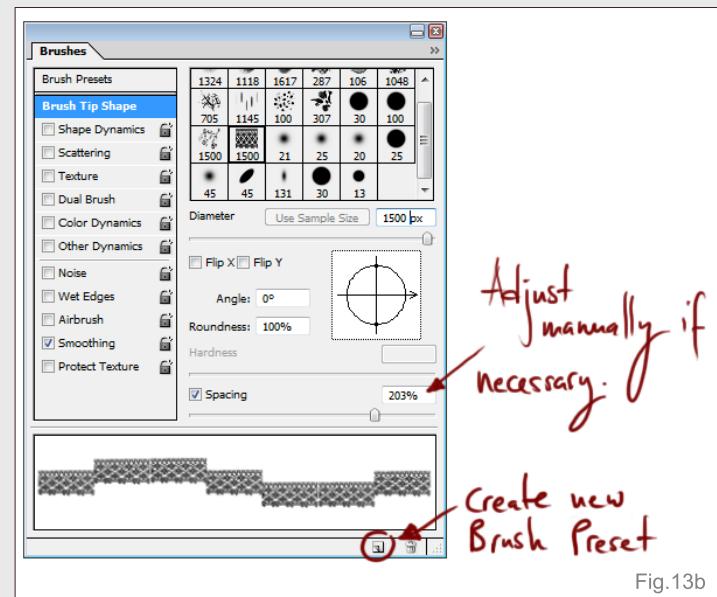


Fig.13b

The easiest ones to use are the Single Pattern brushes. I have not provided any settings for these, as they are usually stamped onto an image rather than used to paint. Here are two examples of brushes like that (Fig.14).

When using these kinds of brushes, always make sure you use them on a separate layer as they need to be adjusted. Why? Because they need to follow the flow and folds of the fabric they are on, and have to have the right perspective, too.

It's quite simple, really, though you may need a little bit of practice with this:

Here is one of the patterns on fabric with folds (Fig.15). If we want the pattern to slightly wrap around something, like the side of a dress, we first need to adjust the perspective of it. To do this, we go into Edit > Transform > Perspective. We now push and pull at the corners and sides of the Transform tool until we get it roughly in the right position. If some of the pattern is going over the edges of the fabric, it shouldn't be of any



Fig.15

concern to us at the moment. Let's continue with making the pattern fold. The fun starts here!

If you're working on a small area in a rather big painting, you may want to select the area the pattern is in with the Marquee Tool. This will cut down the loading time of the tool (or Filter?) we'll be using next: Liquify. You can find it under Filter > Liquify, and it's a small program all in itself (Fig.16).

To do what we are about to do, choose the Forward Warp Tool and adjust your Brush Size to what is appropriate for what you need. The brush should be slightly larger in diameter than what we are about to warp. Also make sure you have Show Backdrop ticked at the bottom, and Mode set to Behind, while Opacity should be something between 50 and 70. I

personally also like to show the Mesh, as it gives me a better indication of what I am doing.

Now we gently start to push the pattern into the folds of the fabric, using short, one-way strokes, lifting the brush off after every stroke. Resize the brush as often as needed. For large or long areas, such as flower stems, we need to start at one end and slowly work our way to the other end with repeated brushstrokes. It is impossible here to make long strokes as it will only warp the part where you first set your brush down on the canvas (Fig.17).

The deeper the folds, the more we need to push the pattern into them, creating the illusion of it bending with the fabric. If folds overlap, it may



Fig.16



Fig.17

be wise to first cut the pattern up and actually removing part of it (where the folds would hide the pattern) and then putting it back together before using the Liquify Filter.

Once we have our result (Fig.18), we may have to adjust it some more here and there, as sometimes it is hard to judge where the pattern is going while using the Liquify Filter.

At this point, if parts of the texture or pattern go over the edges of whatever they are on, just erase those parts.

This still doesn't look quite right because the pattern is one single block of color; it needs shadows and highlights according to the light source in the painting, and according to the folds of the fabric. To easily paint over the pattern we click on the little Lock Transparent Pixels icon at the top left of our Layer Palette (the small

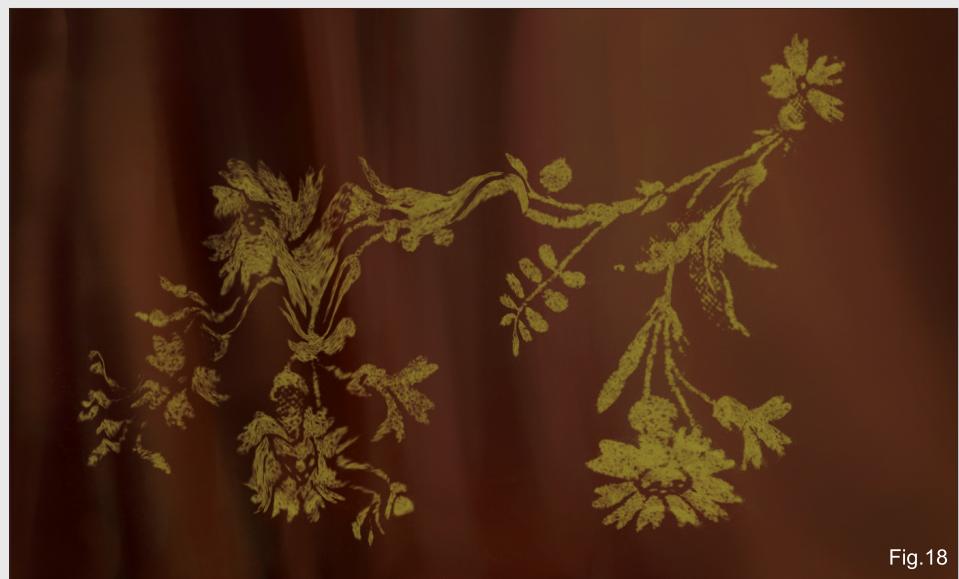


Fig.18



Fig.19

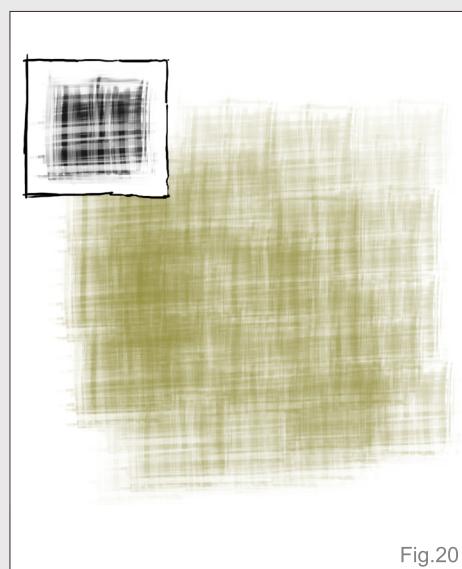


Fig.20

checkered square) – this will do what it says: locks all transparent pixels, leaving you to paint happily over everything else on the layer, which in this case is the pattern, until you are happy (Fig.19).

This is pretty much what you need to do every single time you use a complete fabric texture or just a pattern – no matter what it is. If it's not a flat surface, it needs to go with the direction of the fabric. There is no way around that. At all! All the textures and embellishments in the final image of this tutorial were applied with that same method.

By the way, sometimes a brush like these looks even better if you apply the Median Filter or a slight Gaussian Blur, just to make especially photographed or scanned textures look more painted, and thus more part of the image. So now that we have looked at one brush in action, what do some of the other brushes look like? I could just refer you to the final image, but figured it'd be nice to see them just by themselves for a clearer view (Fig.20 – 24).

Conclusion

Working with these kinds of brushes may take some getting used to, but the result is well worth

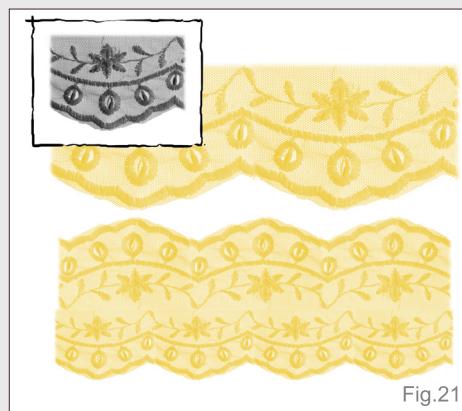


Fig.21

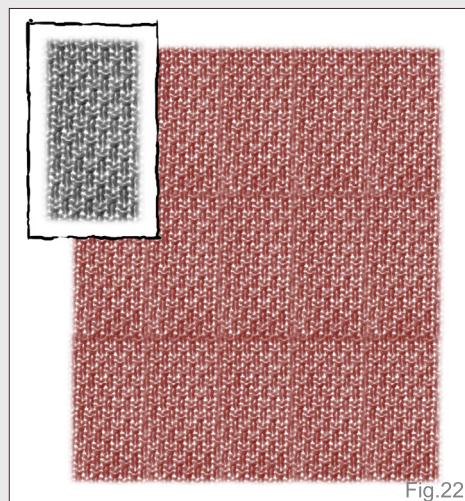


Fig.22

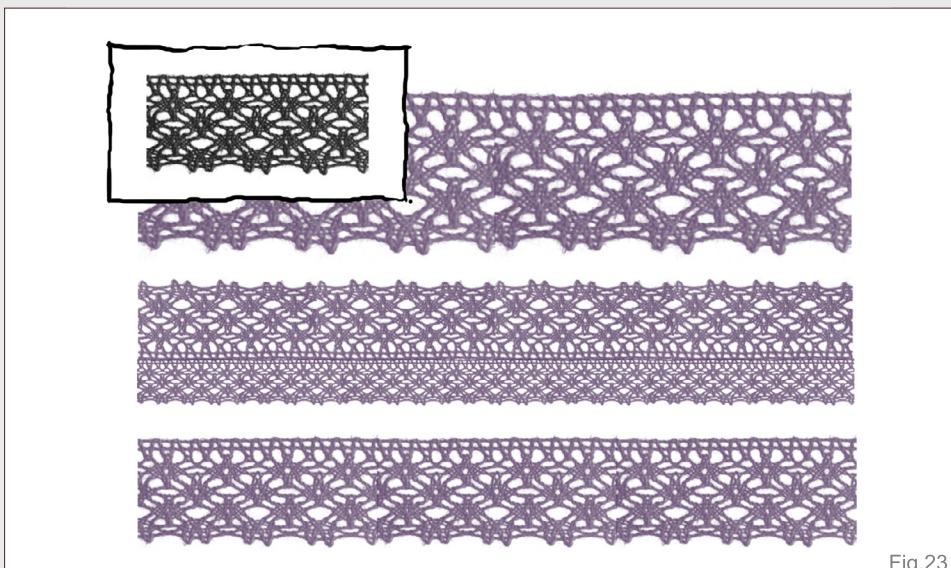


Fig.23

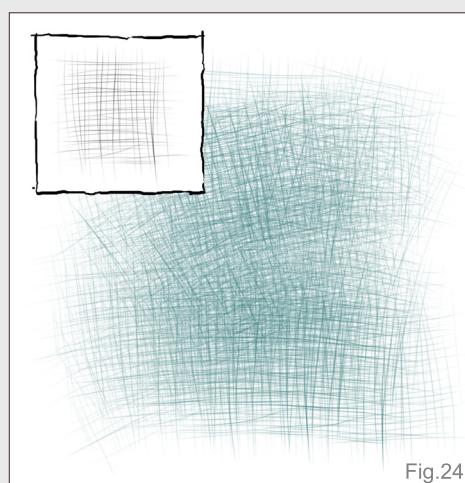


Fig.24

the time taken. I truly hope this little tutorial is of some help in getting you started with it all.

Detailing your paintings should be fun, and with these brushes it will hopefully be just that. And if you're really into it, you may even find yourself keeping an eye open for new patterns all the time, be it when shopping, reading magazines or browsing online. Or, like me, you'll start a whole folder on your computer of hand-painted patterns that you can adjust or modify as you please, when you please. The possibilities are truly endless...

Happy brushing!

Nykolai Aleksander

For more from this artist visit

<http://www.admemento.com/>

or contact

x@admemento.com



**DOWNLOAD
RESOURCES**



•Free Brushes



Add **UN**-Natural 3D Environments

Trees, forests, mountains, oceans, skies... **TERMINATED CITIES**
Vue 7 adds entire 3D environments to your scenes.

TERMINATOR SALVATION



©2009 Whiskytree for Warner Bros Pictures.

"Vue allows us to create a unique look with the material editor and to combine different materials and play with all sorts of things. It's ideal when you're in the process of developing the look of your shot.

Vue gave us instant results, so it was a good solution for our explorations. It just seemed like the right tool!

Joe Ceballos, Art Director and Concept Artist, Whiskytree



Vue 7.5 xStream - The Integrated Solution

Vue 7.5 xStream™: The Integrated Solution

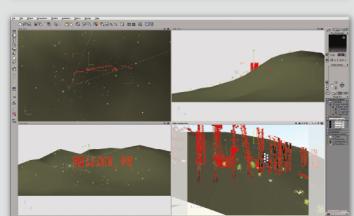
Vue 7.5 xStream offers professional CG artists a complete toolset for creating exceptionally rich and realistic natural environments and rendering them in 3ds Max, Maya, XSI, LightWave and Cinema 4D.

Vue 7.5 Infinite - The Standalone Solution

Vue 7.5 Infinite The Standard Solution
Vue 7.5 Infinite offers an all-round combination of unequalled scenery creation power, advanced rendering and full-featured animation tools.

Ozone 4.0 - Hyper Realistic 3D Atmospheres

With Ozone 4.0 create hyper-realistic atmospheres in 3ds Max, Maya, XSI, Lightwave and Cinema4D.



Experience Vue 7 and Ozone 4.0 for free, <http://dt6.e-onsoftware.com>



“...thinking about the character and that what he/she does plays a great part in their appearance.”



DYNAMIC CHARACTERS

ENHANCING YOUR CHARACTER CONCEPTS



This series of tutorials aims to show some of the methods and processes used to design and develop characters from initial thumbnail sketches through to a final concept. The series will be divided into five parts and will focus on the general design methods commonly used by character artists. It will begin with quick sketching techniques used to suggest ideas and develop a theme before moving onto creating variations once a subject is established. The third instalment will culminate in a finished concept design, after which we will move onto the importance of posing your character and the impact this has on their personality. The series will conclude with a chapter dedicated to choosing suitable eye levels and camera views to best convey an emotional state or emphasise a storyline.

CHAPTER 1 | Thumbs & Silhouettes

CHAPTER 2 | Visual Brainstorming – Variations on a Theme

CHAPTER 3 | Speed Painting & Concept Design

The third instalment will assume that all of the key characteristics have been established and ready to be moulded into a final design sheet. Colour schemes along with detailing will be covered in this chapter which will result in a finished concept.

CHAPTER 4 | Dynamic & Exaggerated Poses

CHAPTER 5 | Camera Placement, Framing, Fore-shortening & Distortion





Dynamic Characters

Part 3: Speed Painting & Concept Design

Software Used: Photoshop

Introduction

In this third part of the tutorial series we will take on board what we have learned in the previous chapters of this series, by Darren Yeow (Part 1) and Bruno Werneck (Part 2), and we will now create a model sheet based on our character design.

We will assume that the potential modeler for our character concept is an experienced one, is capable of working from a modeling sheet, and that he/she has a good understanding of form. And from this assumption, we will paint the character from an angle so that all shapes have better definition, and we therefore avoid the "stiffness" often inherent with a standard view representation.

Anatomy

I tend to incorporate the anatomy base early on into my design phase so that whilst I am sketching my way to the final design, I already have the anatomy of the character underneath. That way, each new part or design follows the same base so that there is no confusion or odd exaggerations in form.

With the anatomy base (**Fig.01**) ready to be painted upon, I start to lay down brushstroke after brushstroke onto a new layer, whilst not being too bothered by exact lines at this stage because I tend to mold and carve my forms as I go along.

Front View

I try to keep the armor that I paint in line with the anatomy underneath so that I know it is functional, and that all parts are where they should be, to ease the future modeling and rigging work that our colleagues will do (**Fig.02**).

I continue to define parts by laying down basic brushstrokes with a light source in mind to better define the form. It is important not to zoom in too much here as it is easy to get caught up in details at a stage when they don't really matter. Try to keep yourself from doing so with the mantra, "It will all make sense in the end."

The skin and armor are too close to one another value wise, so I create a new layer on top using the Overlay layer blending mode. I paint with white over where I want the skin to be lighter. This helps the character to read better, and now the skin and metal stand apart (**Fig.03**).



Fig.01

Fig.02



Fig.03

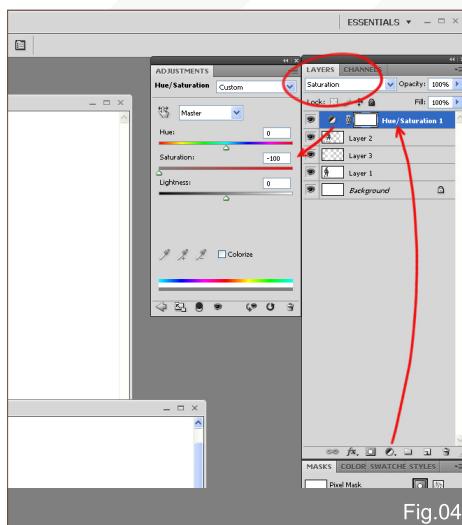


Fig.04

That layer blending mode has a tendency to change the hue of what is underneath it, so by creating a Hue/Saturation Adjustment Layer on top of your painting, which is set to Saturation: -100, it will help your values stay gray rather than becoming blue, for example (**Fig.04**).

I continue to add to the details and pieces of armor of the design, thinking about the



Fig.05

character and that what he/she does plays a great part in their appearance. Personally, I tend to create my characters by function rather than taking a more aesthetical approach. And in this case, I'm trying to visualize the armor on my body and how it would move if I were to be wearing it myself. Usually in this way I can figure out what works and what doesn't (**Fig.05**). I still haven't really gone into great detail of the line quality or shapes. This will be addressed at a later point; right now it's all about getting the necessary

information down – the spit and polish comes later. So let's move onto our rear view, now.

Rear View

If you think of your character as a form, the front could easily also be the back (**Fig.06**). So I copy the character over to the right, and that will become our rear view. Due to the fact that the character has been painted at an angle makes this phase a little bit trickier than if it were drawn in a standard view, but it's not a big problem.



Fig.06



Dynamic Characters

Part 3: Speed Painting & Concept Design

Imagine a line going across the forms you have painted – the centerline – and this will help with your understanding of how to create the back view a lot easier (**Fig.07**).

I usually create the centerline in my mind, but because this is a tutorial I will illustrate the thought process for you (**Fig.08**). By using the centerline while flipping anything in perspective, it shouldn't be hard to paint as long, as the flip is a 180 degree rotation.

I have now reached the point of the back of the design where the armor is starting to become quite defined (**Fig.09**). I want to make sure it is interesting from all angles so I will start to paint the side view now.



Fig.07



Fig.08



Fig.09



Side View

I create a new layer at the top of the image and lay down some straight lines from the essential points, to use them as my “anchor points”. Areas that define a form should get a line. Taking the helmet as an example, there will be a line at the top of the helmet, and a line where it will end at the bottom (**Fig.10**).

You can move parts around now in order to make it look its best. At this stage I tend to do a lot of adjustments and alignments. If I'd previously spent a lot of time defining too many details I would have had to redo them now whilst



Fig.11

making these changes, which wouldn't be a very efficient workflow (**Fig.11**).

Adding Definition

I am now at a point where I am satisfied with the adjustments made, and so I will now start to

define the shapes in order to make it as clear as I can for our modeler to follow (**Fig.12**).

By creating temporary selections and painting within them helps me to keep the edges as clear as possible, without having to go over them lots

of times to make them all nice and crisp. If you look at **Fig.13** I have painted a small example of the technique for you. Here I have a fuzzy line between two shapes that I want to make clearer. I make the selection and paint inside it. By inverting the selection back and forth I



Fig.12

Dynamic Characters

Part 3: Speed Painting & Concept Design

can continue to detail and paint without being bothered about the edges and keeping them clean. This is just a quick example, but it should help illustrate the method for you to experiment with.

By applying the same technique, the details and edges become defined enough for the character design to be suitable to be modeled from (Fig.14).

Color

As a final touch, and to add some color to the design, I create a new layer on top of all layers which I set to the Color layer blending mode. I paint in blocks of color to separate the parts of the design even further, making it easier for our modeler to follow and translate into 3D (Fig.15).

And we're done!

Björn Hurri

For more from this artist visit

<http://www.bjornhurri.com/>

or contact

bjornhurri@hotmail.com

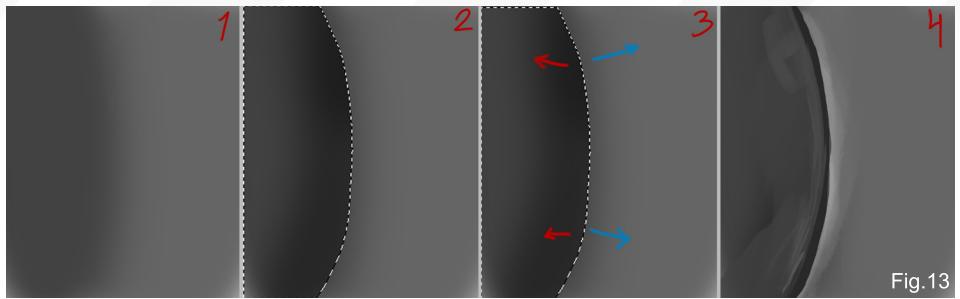


Fig.13



Fig.14





Fig.15

**DOWNLOAD
RESOURCES** 

- Free Brushes
- Free Fibonacci Spiral (PSD)

Chapter 1 – July

Introducing Photoshop's Workspace, Graphics Tablets, Screen Calibration, Color Profiles and the Brush Tool

Chapter 2 – August

Canvas Settings, Scanning Drawings, Swatches, Colour Pickers, Colour Theory, Layers and Custom Brushes!

Chapter 3 – September

Composition Rules, Sketching and Perspective, Understanding Light and Blocking-In. In the third chapter we'll be looking into

the rules of composition, sketching and perspective, learning about determining and applying a light source in paintings, which brushes to use for blocking in a sketch, and also what tools can be used for drawing straight lines without much hassle

Chapter 4 – October

Colouring from Greyscale, Colours beyond Blocking-In, Blending Methods and Using Photos

Chapter 5 – November

Quick Masks, Using the Wand Tool, Liquify Filter uses, Layer Masks – and Painting!

Chapter 6 – December

The Final Part: Finishing Touches, Filters, the Unsharpen Mask and Saving your Work

DIGITAL PAINTING

Beginner's Guide to



This Workshop Series will look at, just as the title suggests, all the things that we need to know to get us started with Photoshop – mainly for painting, but also for other things such as matte painting and photo manipulation, which often use the same tools. We will be covering all the technical aspects of the programme, as well as some technical sides of painting that'll help us starting to swing the virtual brush!

Beginner's Guide to Digital Painting

2d
artist

Chapter 3 – Composition Rules, Sketching and Perspective, Understanding Light and Blocking-In

Software Used: Photoshop

Introduction

Sometimes it seems strange that so much technical knowledge is needed to even begin being creative in Photoshop. We've learned a lot in the last two workshops, and if you are still here now, reading this, then I can already tell you that you have the dedication it takes to make something truly great out of this!

As promised last month, we'll be starting to paint this time. However, even this will require some background information that I find impossible to ignore. So let's get on with it.

Of Fibonacci, Forms and Freedom

Fib-who? – Fibonacci, nickname of Leonardo Pisano, born around 1124 in Pisa, Italy, and the "greatest mathematician of the middle ages". I'm pretty sure you have heard of the Fibonacci sequence – a sequence of numbers that he introduced to the Western World – which also

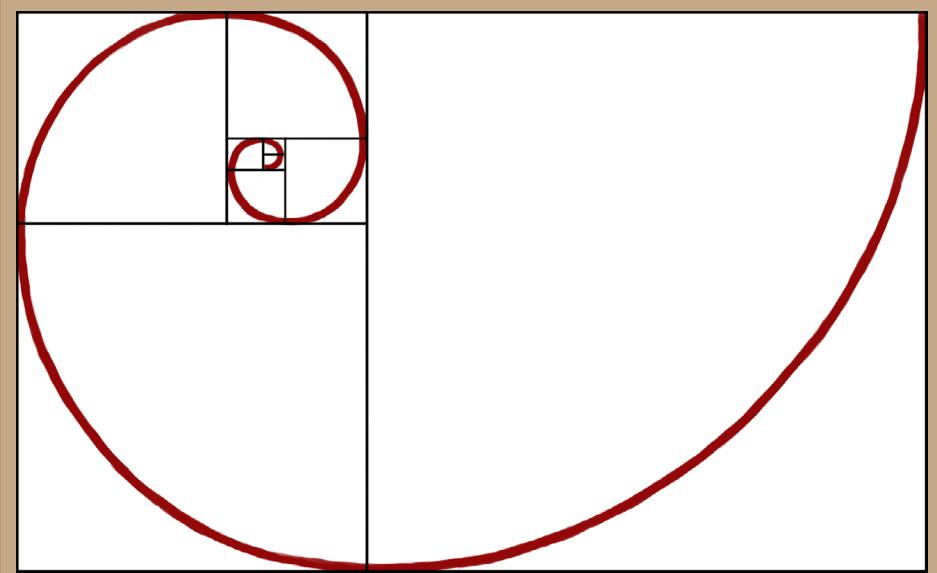


Fig.01a

featured in the film, "The Da Vinci Code": 0-1-1-2-3-5-8-13-21-34-55-86...

You may wonder what this – or even mathematics – has to do with art? You'd be surprised. Here it goes:

The Fibonacci sequence – also coined the "God Number" – is present in many biological settings; this means flowers, trees, seedpods, arrangement of leaves on a stem, and even in the hierarchy of a honeybee colony. You may not be painting many bee colonies in your time

as an artist, but when it comes to flowers and such things, it can be useful to know that flowers' petals and seed arrangements (this is especially visible in sunflowers) adhere to the Fibonacci sequence. The only flowers you will find in nature have a petal arrangement of two adjacent numbers of the sequence, such as eight petals going in one direction, and 13 in the other, beneath the first.

Now you may think that this is sort of useful to know, but kind of boring, as your audience will most probably not count every flower petal in your pictures. And you'd be right, to a point. But I had to start approaching this subject somewhere now, didn't I?

This sequence is also known as the "Golden Sections" (Fig.01), which in turn can be translated into the Fibonacci spiral (Fig.01a), and can be found in nature as well (even though it's a less substantiated claim), like in the spiral of shells and the curve of waves. – It is perfection: mathematics revealing the beauty we see and create as artists.

If you are still not convinced that this has anything to do with painting, then think again. Why do we like something when we see

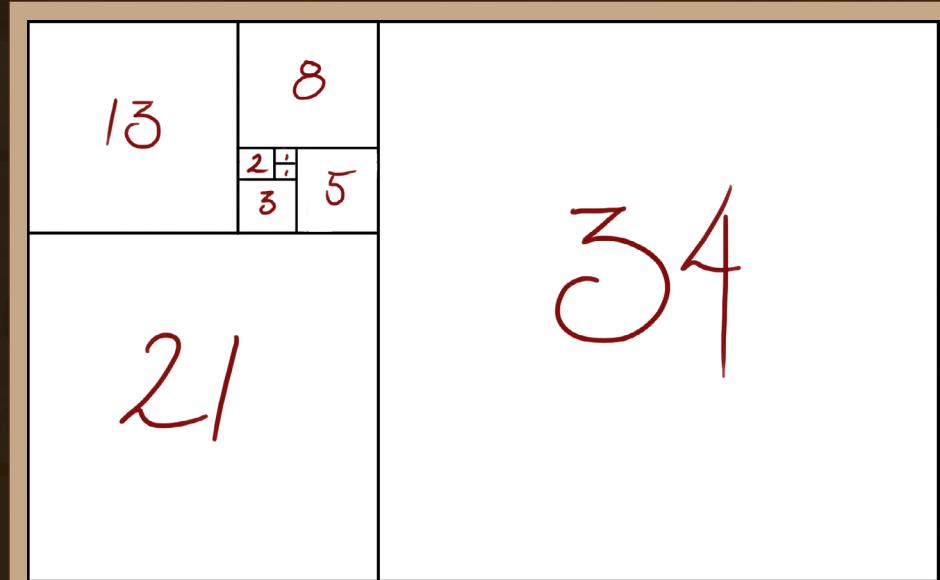


Fig.01

it? – Because it appeals to us. And I am not talking hot babes here, although they certainly have their merits as well. What I mean is the composition of a painting. How often have you looked at a painting and thought to yourself that you love how it all works together or that you simply love it, but don't know why? This is most probably due to the fact that the painting adheres to the Golden Sections.

Superimposing the Fibonacci spiral onto some of my paintings (so no copyrights are broken), you can see it works out, even with the ones that have the main subject in the centre (Fig.01b).

When you start sketching an idea, you don't have to keep the spiral in mind. But when you feel something is off somehow, superimpose the spiral and you'll most likely very quickly find out why.

Funnily enough, most seasoned artists automatically stick to this recipe, without ever touching the Spiral. Convinced now?

[Winks]

Sketching!

So, let's look at sketching something then. There are several ways of going about doing that digitally, but if you'd rather do your sketches on paper, please feel free to do so.



Fig.01b

Some artists find it useful to begin an idea with a thumbnail sketch, which is a very small sized sketch simply showing the very basic composition and colors. Doing this on such a small scale saves time, and as you can see the entire canvas on your screen makes it easier for you to take in the whole composition and

adjust things where necessary. For these kinds of sketches, all you need is a small canvas (something around 300 pixels is a good size – I'm just doing it larger for the purpose of this article) and a basic round hard-edged brush. Forget about details, just splash the paint on the canvas, and you may end up with something like what you can see here in Fig.02.

So we have a landscape, looking pretty much like a desert, with some mountains and some kind of structure. Seems good enough to me, so let's stick with this one, shall we?

If this is not your idea of sketching, and prefer line drawings before you even want to consider colors, that's not a problem either. Here, too, you may want to start with a smaller canvas, although not quite as small as the one of the thumbnail sketch – 1000 pixels at either side should suffice – which can later be resized.

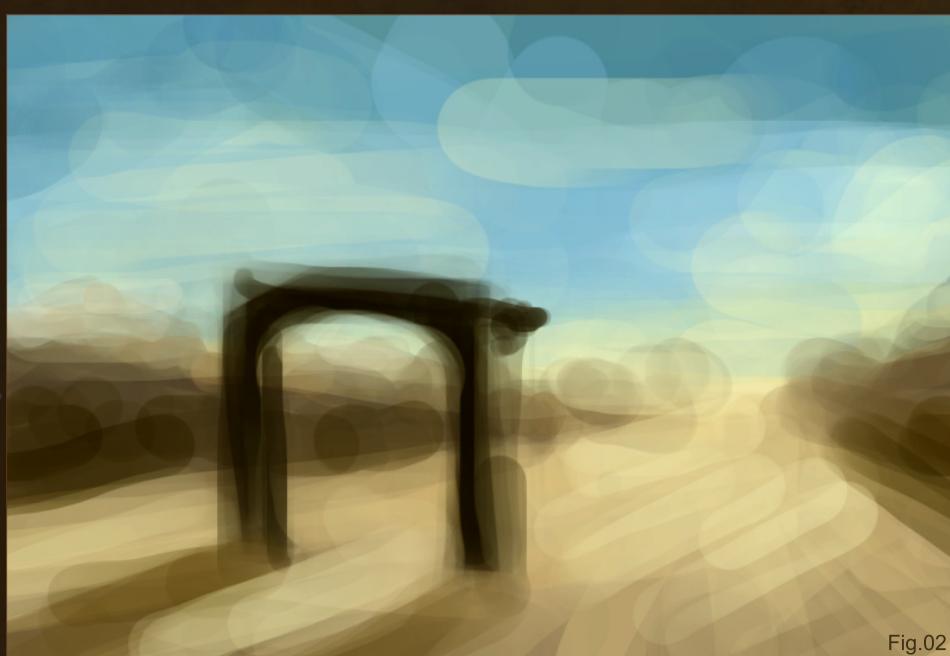


Fig.02

Beginner's Guide to Digital Painting

Part 3

2d
artist

You can of course open up a new canvas that straight away has the size you want to paint at, and simply have the canvas "Fit on Screen" (View > Fit On Screen) so you can see all of it.

I personally dislike sketching on a white canvas, for two reasons: too bright, and also, I never start a painting on a white background, as white has the tendency to make your colors appear flatter and lighter than they actually are. The same goes for black, by the way. So for a line sketch, I like to use either a neutral color as the background – preferably one that I want to appear in the painting. You can either choose one before opening a new canvas, as discussed in the last chapter, or open a white canvas and then choose your color. You can apply it to the background by using the Paint Bucket Tool, which you find with the Gradient Tool in the tools palette (**Fig.03**).

Once you've done this, add a new layer to the canvas and name it "Sketch". This will now be the layer that we sketch on, and that, if you've chosen to start on a small canvas, can later be dragged onto a bigger canvas and transformed for painting.

Pick your Paintbrush, and a small round Brush Tip. I like setting my Size Jitter and Opacity

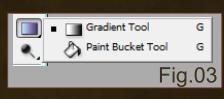


Fig.03



Fig.04

to Pen Pressure, so you may want to try this, too. Choose a dark color (black or dark brown, perhaps?) and you are ready to go. My result can be seen here in **Fig.04**.

Not very neat, is it? – It doesn't have to be. Let's see about the composition now and apply the Fibonacci spiral – you can find it available for download at the end of this workshop as a conveniently layered PSD file; simply click on the Free Resources icon to download. Kind of works, right (**Fig.04a**)?

If it isn't totally spot on, don't worry about it, but if it is totally off you may want to reconsider your composition and perhaps change a few things around. Totally central alignment of the elements in your painting only really works for certain styles of illustration, or more design-oriented images.

By the way, if you have trouble with sketching things freehand, don't hesitate to use references to look at – it really helps. There are several good websites out there that offer free stock images if you don't have any photos that you have taken or can take yourself. Just please stay away from anything that is not labeled clearly as stock or royalty free; people can get mad when their pictures are used without their permission.

Now you may want to clean up the sketch a bit, especially if you've added an architectural structure, as I have in mine. Why? Because most architectural structures have straight lines, and adhere to perspective. Perspective is important even for landscapes, so you may want to consider doing what I am about to show you now.



Fig.04a

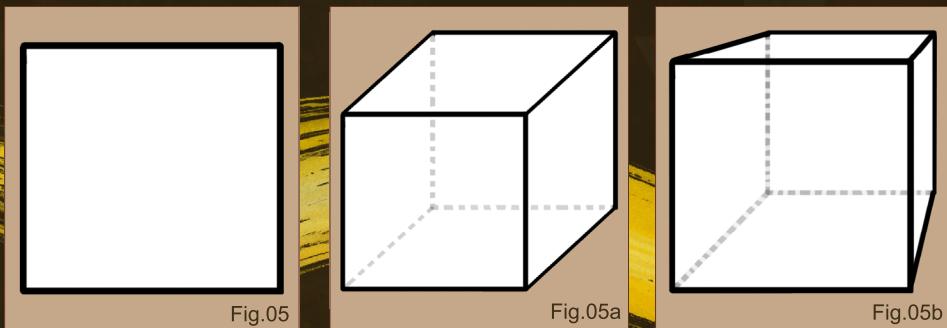
Perspective

You will have seen perspective in action before, without even noticing it, because it's always been there. When you were standing in a street, looking down it, or even up to the tops of the skyscrapers – the street, or skyscrapers, seem to get narrower the further away they get from where you are standing, and the lines of buildings seem to be at an angle, too. This is because they all run towards an invisible "vanishing point" at the horizon – or two, or three, or as many as you can think of. Let me give you a simple example of the famous cube.

In **Fig.05** we have a square – a flat one – as if we are looking directly at it, perfectly centered. Let's add some depth, and the square turns into a cube (**Fig.05a**). However, this one has no real perspective; there is no vanishing point (or maybe it's just too far away for us to notice), it's just three-dimensional. Now, in **Fig.05b**, the very same cube is drawn with a vanishing point in mind. Instantly looks more realistic, right?

Eyeballing perspective works to a point, but is never quite accurate as our eyes love to play tricks on us. That's where perspective grids come in very handy, as they show us every line, every angle we need to know about.

In newer Photoshop versions you have something called the Perspective Grid Tool,



and I've heard it can be useful for some things, but not for everything. I don't have this Tool in my Photoshop version, so unfortunately I cannot explain its proper use here. I am sure though, that if you Google this tool, you will find quite a few resources regarding its use.

In our case right now, however, let's be old-school and draw our own perspective grids. Besides, if you work on paper this is your only option anyway!

Before we start with this, I guess I'd better explain how to draw perfectly straight lines in Photoshop, as without them it's pointless to draw a perspective grid. You have two options; both are time-efficient and easy to use. One of them will also be useful later on, when you actually paint, so please don't dismiss this outright if you feel it takes a nanosecond longer to do that the first.

There is no need to add a new layer to the canvas for the first method, as new layers will automatically be created with it. Select a color that will stand out well from your sketch and background. Now select the Line Tool. You will find it under the Rectangle Tool (**Fig.06**), or, if you cannot be bothered to wait for the mini menu to pop up, just click the Rectangle Tool and go to your Options Bar, where you can select the Line Tool (**Fig.06a**). The Line Tool does what it says: draws straight lines. You can change the line width and color in the Options Bar (**Fig.06b**), and depending on the size of your canvas, you may want to adjust this to something easily visible when your canvas is set to "Fit on Screen". If you made the first line

and cannot see it – if your canvas is zoomed out from its original size this happens a lot, because the stroke made is just too thin to be seen at that size – simply adjust your line width.

For the second method add a new layer to your canvas before you do anything else, and then choose the Paintbrush instead. Select the standard Hard Round Brush Tip for this, and make sure any kind of special settings are switched off, even the Size and Opacity Jitter. Make it small, as you don't want big fat lines covering your canvas.

To use the Paintbrush to make perfectly straight lines, you need to put your pen down on the canvas where you want the line to start, and then press and hold the Shift key on your keyboard while you draw the line. This works for horizontal or vertical lines. To draw straight diagonal lines, as you would need to for the grid, put the pen down on your starting point, and press and hold the Shift key while lifting the pen off the canvas and putting it back down where you want the line to end – the diagonal line will draw itself! For some fun, you can even continue to hold the Shift key and just dot your pen around on the canvas for lots of angled lines, or zigzag patterns – whatever takes your fancy!

Note: What I have found is that it's easier to draw freehand diagonals with the Line Tool, especially when you have to be precise, as you can see where the line will go before you commit it to the canvas. If you need precise vertical, horizontal, or 45-degree angled lines, simply press and hold your Shift key after you've

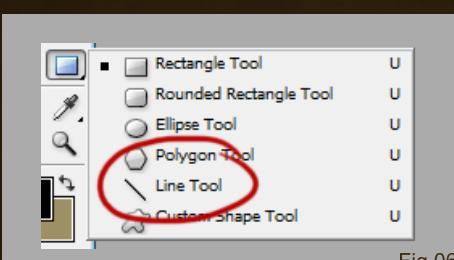


Fig.06

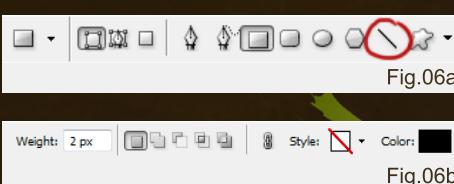


Fig.06a

Fig.06b

set your pen down on the canvas – the Line Tool will do the rest for you, depending on the direction you drag it into.

There are two types of perspective grids that come in useful for various things: the four-plane perspective, and the two- (or multiple) point perspective. These are probably not the official names for them, in which case I hope I will be forgiven, but this describes them pretty well anyway. In any case, I'll show you both.

Two-Point Perspective

The two-point perspective is the easier one to draw, and also a very simple method of determining the perspective of architectural structures in a picture, so let's start with that one.

First, draw a straight line where your horizon would be (just in case you don't know what that is, it's the imagined line where the sky touches the ground). That's all – just draw that line. Now we have to determine where the vanishing point – or points – would be. The vanishing point is a point at the horizon that all lines run to. And it's not always just one. In my example, there are two (**Fig.07**).

To now draw a grid without any problems, all you have to do is put your pen down on the vanishing point and draw lines sticking out at various angles from this point, like sunrays, both above and below the horizon line (**Fig.07a**). They don't all have to be at the same distance from each other – draw as many or as little as you like.

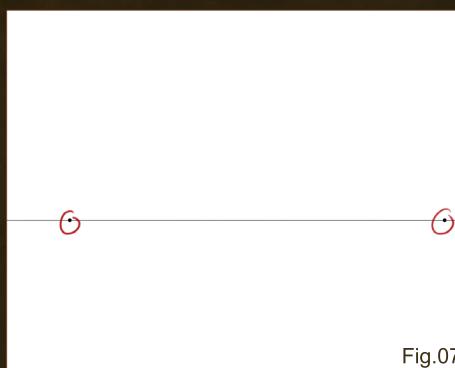


Fig.07

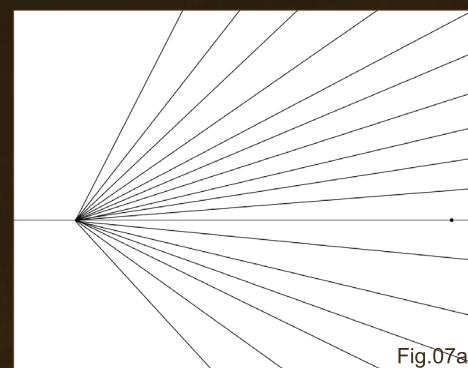


Fig.07a

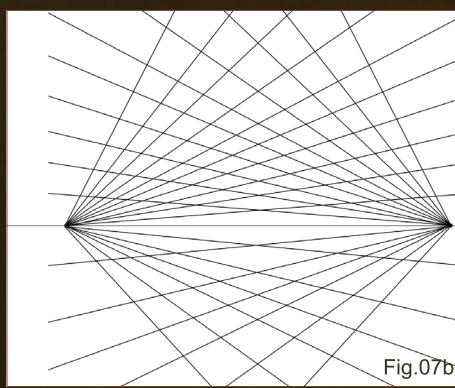


Fig.07b

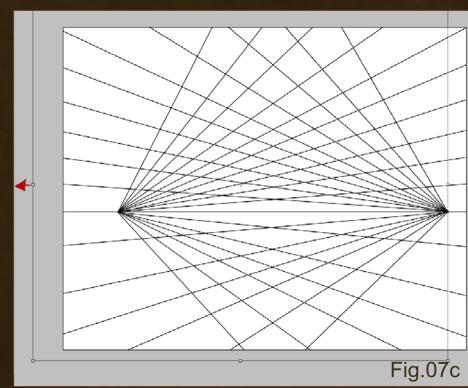


Fig.07c

If you now look at your Layers palette, you will see lots of new layers that are called "Shape". Link all the Shape layers (but not with your Background layer!) and go to Merge Linked. You now have one layer with all your lines on it. Next up, go to Layer > Duplicate Layer and then check your Layers palette again: two layers with the same thing on them. Select one of these two layers – really doesn't matter which one – and then select the Move Tool , not just because you may need it in a minute but also because if you keep the Line Tool you will not be able to do what we are about to do: transform the layer.

So, once you've got your Move Tool, go to Edit > Transform > Flip Horizontal, and your second layer will flip itself around. If it looks just right, leave it where it is. If it doesn't, you can move it with the Move Tool to where you want it, making sure that the horizon line on both your grid layers line up (**Fig.07b**).

If you need to make one of the two layers longer to fit better on your picture, you can do this by going back into Edit, but instead of Transform you select Free Transform. Remember that only the active layer will be affected, so select

the layer you want to transform first. In Free Transform, you get the same box around your layer as you got with the Crop Tool: you can rotate it by its corners, or stretch and squish it by its mid-line dots. For this one, I suggest you simply grab one of the mid-line dots on the side and pull on it (**Fig.07c**) until you reach the desired size. Apply the transformation by either hitting the tick mark icon in your Options Bar, by double-clicking your image, or by selecting a different tool. If you want, you can now merge the two grid layers. And there's your finished perspective grid (**Fig.07d**). You could of course continue drawing lines all around the vanishing points if you need them. This one would be, as said, for a single structure.

Four-Plane Perspective

Now for the four-plane perspective. This one only uses one vanishing point (although two can be used as well, to make it really confusing). This is great for painting rooms within a building, or whole cityscapes, or even landscapes...

You can start out in two ways: either by determining the vanishing point (on an imagined horizon line), or by drawing a rectangle or

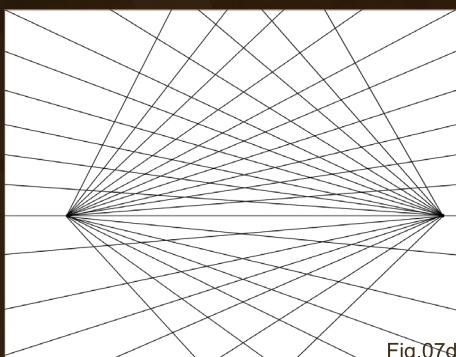


Fig.07d

square (like the back wall of a room). When doing the latter you have more freedom regarding the grid we are about to draw (**Fig.08**).

The first option of placing a vanishing point anywhere on the canvas would continue with drawing a big X on the canvas, with the lines crossing through the vanishing point, and then adding the square or rectangle, with the corners

touching the lines. This gives you a centered perspective and isn't always that dynamic in terms of composition.

Anyway, let's stick with the one I've started here. We draw four lines, one through each corner of the rectangle, starting at the vanishing point (**Fig.08a**). Now keep drawing lines that radiate out from the vanishing point, one side at a time, until your canvas is full (**Fig.08b**).

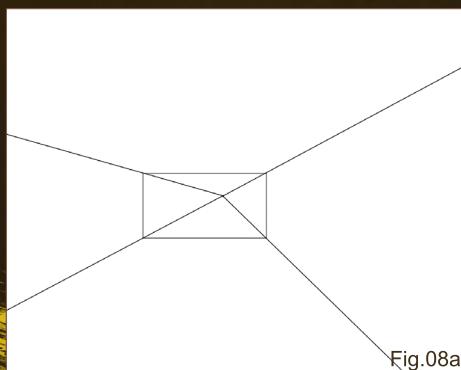


Fig.08a

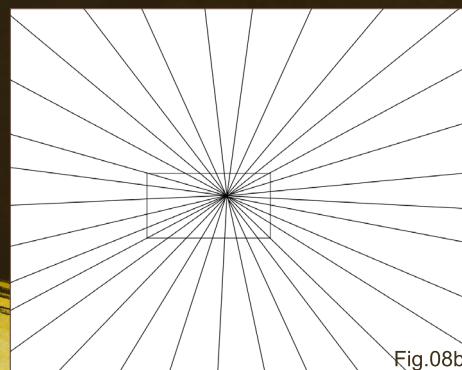


Fig.08b

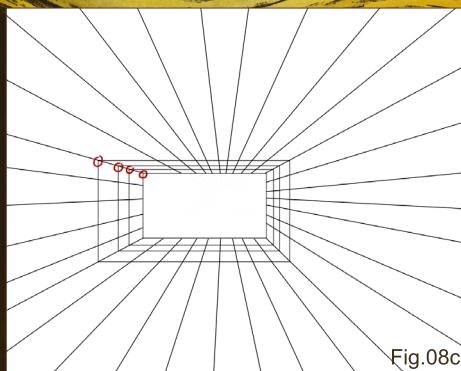


Fig.08c

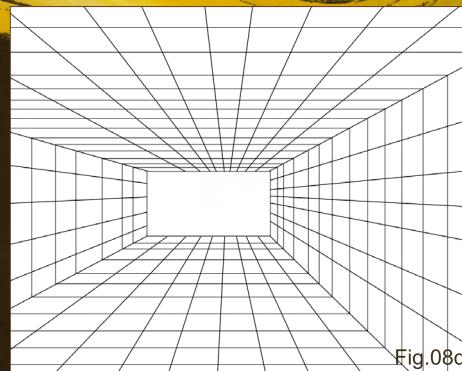


Fig.08d

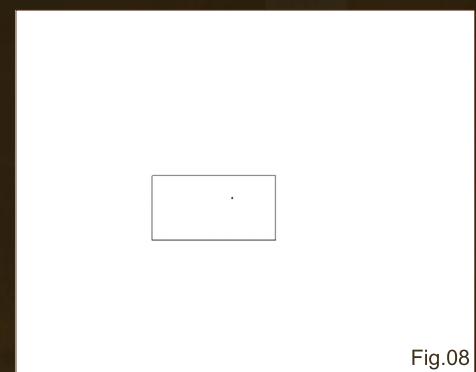


Fig.08

You can erase everything that is within the square, but don't have to. I just find it easier, especially when drawing a room. Next up, draw the vertical and horizontal lines – in essence, bigger and bigger rectangles around your original one, with the corners always touching the same lines as the original rectangle (**Fig.08c**). I suggest drawing the complete rectangle before starting on the next one, as this keeps the corners matching up. The finished result should look like a "mesh room" (**Fig.08d**).

If you've worked on multiple layers for this, or layers were created, you may want to merge all the layers into one to reduce your file size, as well as make it easier to remove the grid later or to adjust its opacity – something that comes in useful when painting and sketching, as those lines can be distracting (for this, I suggest to Merge Visible, after making the Background layer and any other layers you do not want to merge with the grid invisible).

Note: Remember that all vertical lines remain vertical, no matter what your perspective is ... unless you happen to be drawing the leaning tower of Pisa, that is.

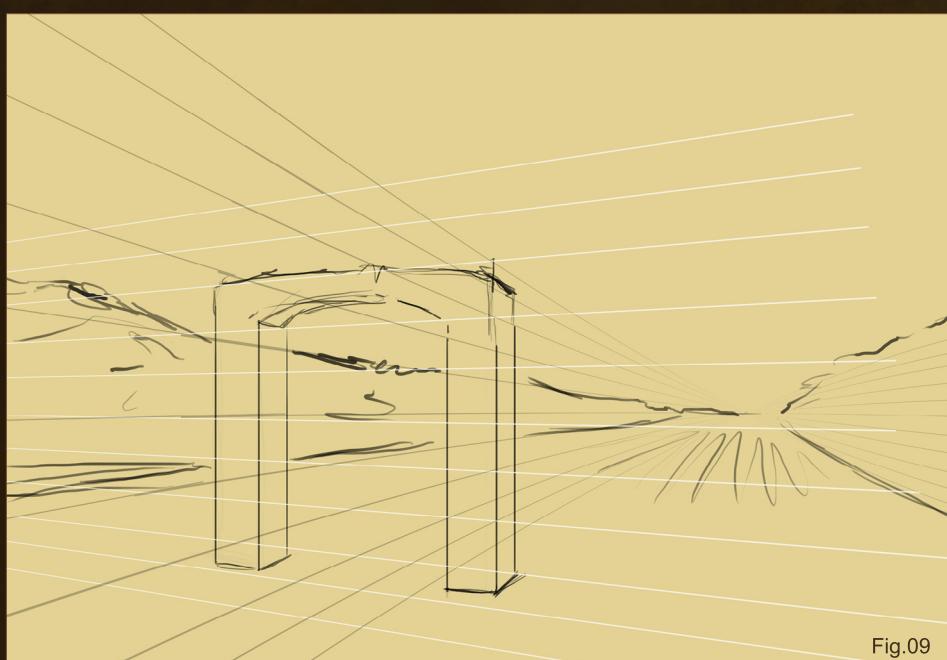


Fig.09

Now try and apply a perspective grid to your sketch, according to what you've drawn. In my case it's a bit on the complicated side, as I need a mix of perspective grids for the landscape and the structure, with one of my vanishing points way off the canvas to the left. And yes, it confuses the heck even out of me! But it works (I think) (**Fig.09**).

Beginner's Guide to Digital Painting

Part 3

2d
artist

You can now refine your sketch according to the grid. I choose only to refine my structure, as the other stuff isn't really bound to straight lines.

When it comes to architectural structures, it is vital to stick to the grid, as otherwise you might end up with something that even MC Escher would be jealous of: totally warped geometry. Think of a structure in 3D, rather than 2D, as demonstrated earlier with the cube. If you are good at working with 3D programs, by all means feel free to make a simple or even detailed model of whatever structure you want in your painting, and add it onto your canvas either as a reference "sketch" or to paint over later. If you are really bad at drawing buildings, or even simple three-dimensional elements, try out Google SketchUp; it's easy to use (it has a video walkthrough when you first start up the program), isn't very big, and also free. If you use something like this just make sure to adjust the perspective of your painting to the perspective of your structure, or else you'll end up with something truly wonky.

Blocking-In!

We are now ready to add the first layer of color. This stage is called "blocking in", as all we'll do is roughly lay the colors down on the canvas in blocks.

The best brushes to use for this are the Hard Round Paintbrush, an even-edged textured brush, or a square brush (either smooth or textured) with



Fig.10

the Size Jitter off, and Opacity Jitter on. You can find a few brushes like this for download at the end of this workshop – simply click on the Free Resources icon again to download them.

Note: Never (ever!) paint on your sketch layer! Rather paint beneath it, either on your Background layer or on a layer you add beneath the sketch layer. When working on the base of your painting, starting with a landscape or scene, there is no real need to add a new layer, but you may feel more comfortable with it so the choice is yours. I just urge you to not add a new layer for every single object in your painting, as this often ends up with a painting looking very "cut and paste", because the different objects don't really interact with each other.

If you did a thumbnail sketch, pick the colors from that with your Eyedropper Tool. If you didn't, I suggest you compile a color scheme by picking colors and painting them on a separate canvas (Fig.10), or turning every color you choose into a new swatch (I prefer the first two methods, as I don't work with the Swatches in my usual painting workflow).

Consider your Light Sources

Something to consider when you start blocking in your painting is where the light would be

coming from, and perhaps even whether there will be a second or third light source in the picture, like candles, or a fire, or a lamp? You may have noticed that in my little thumbnail sketch I've already thought about it. But when just starting out, light and shadow can seem very daunting. So let's look at it with a simple example.

Here's a shape, a circle (Fig.11) – nice and flat. To turn this circle into a sphere, it needs light and shadow. Imagine this circle is sitting in the sun in a desert, at around mid-afternoon (Fig.11a); the light would touch it only on one side, casting the other into shadow and also making the new sphere cast a shadow on the ground (Fig.11b).

But what if that one light source is a spotlight, like a desk lamp, and there is not much else in terms of ambient light? Things would change a bit then, as a spotlight is a directional light source casting a single beam (Fig.11c), and according to that the light area would look a bit different, as well as the shadows (Fig.11d).



Fig.11



Fig.11a



Fig.11b



Fig.11c

How about if that sphere sat outside somewhere at night, under a full moon, with a small fire going to keep it nice and cozy (**Fig.11e**)? Both the moon and the fire are light sources, but the fire is much closer than the moon is to the sphere, and so the fire becomes the primary light source casting some warm glowing light and more or less fuzzy shadows. The moon cannot possibly compete with this, but still has an influence on the sphere with a very light and ghostly hint of a glow, but not much in terms of shadows (**Fig.11f**). If the moon where the setting sun, the shadows from that light source would be much stronger – it is the sun after all – and overlapping with the ones from the fire. And if there are many different light sources casting an ambient light, there wouldn't be much in terms of shadows, just hints here and there where the light doesn't reach.

Taking all this into consideration, we determine our light source for the painting and start blocking in the colors. I want the sun to shine from somewhere on the right, near the horizon, and so cast my shadows accordingly. For the structure I add a new layer, because it will be easier later to work on it without disturbing the landscape (**Fig.12**).



Fig.11d



Fig.11e



Fig.11f



Fig.12

Instantly, we achieve depth, adding form to the shapes.

We continue refining the scene, ignoring small details for now – you want to get the feel of

the image right first before possibly wasting time on details that later may not work. Start using slightly smaller brushes, and maybe even change the Opacity and Flow manually in the Options Bar to layer our colors like washes, which will automatically make everything blend to a certain degree (**Fig.12a**).



Fig.12a

By the way, if you make a mistake simply go into your History palette and either click on the Delete icon (the little trash can at the bottom), or click and drag the steps onto the icon. You can delete multiple steps at once by selecting any one step in the list, and then drag it and the ones below it into the bin – the ones below the selected step will follow automatically. Just make sure to never delete the very top step in your palette, as it will revert the image to its previously saved stage. If you decide that deleting the steps wasn't a good decision after all, you can reverse it by going to Edit > Undo Delete States. This however

Beginner's Guide to Digital Painting

Part 3

2d
artist

will only work if you haven't done anything new to your picture yet. The moment you make just a single new brushstroke, the chance of recovering the deleted steps is gone ... Forever. Really!

Note: If you feel fine about using colors straight away, I'd suggest not adding a layer to your canvas but to just fill it with a color that would be a good base for the painting, and then take it from there with broad, rough brushstrokes that you will then refine over the course of the painting. Use the same brushes for this as suggested for blocking in a line sketch.

Stepping back in time...

And last but oh so definitely not least, I need to seriously backtrack all the way to the first chapter of this series for a second, before bringing this installment to a close, and rectify something that was brought to my attention by the lovely Lica Rodriguez on deviantART (<http://jlr-lica.deviantart.com>), who was kind enough to point this out to me: Turning colors in images (like photos) into Swatches is possible in Photoshop CS, and this is how you do it:

Open an image/photo – I'm using a picture I took here in South Africa as an example because the color range is rather nice (Fig.13). Go to Image > Mode > Indexed Color. A pop-up box will come up (Fig.13a) that gives us a few options. The default settings won't do, so here we go to change that:



Fig.13

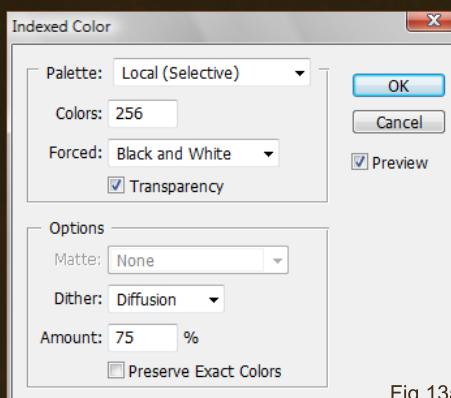


Fig.13a

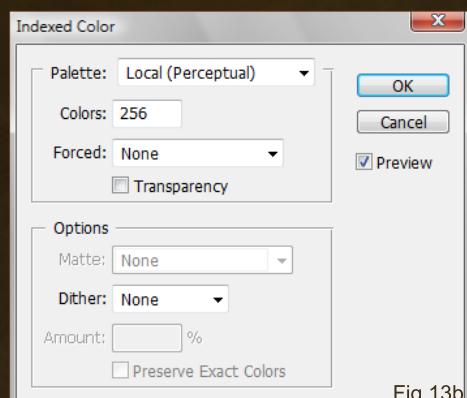


Fig.13b

Set the Palette to Local (Perceptual), change the Colors to whatever number of colors you want. 256 will be the most you can get, and will obviously give you the broadest range of shades. So I'll stick with that. In the drop-down menu of Forced, select None, and uncheck Transparency. Then set your Dither to None, too (Fig.13b). Hit OK.

hoping that at least a little bit of what we've learned this time has stuck. It was quite a lot to digest, but you can always go back and check it up again.

Next time we will be looking at coloring a monochrome painting or sketch, adding to and changing things in a painting, applying different blending methods, as well as using photos – either directly or as brushes in our work. And this is where the freedom of digital painting will truly start ...

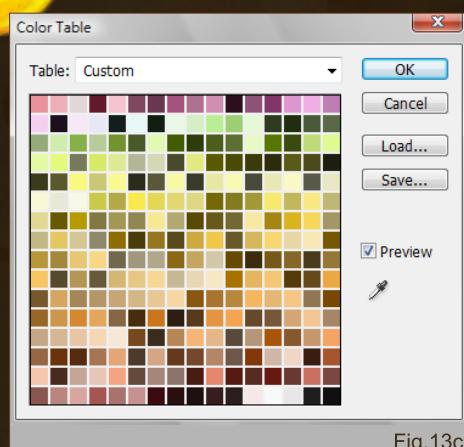


Fig.13c

Now, go back into Image > Mode, and select Color Table – another box will pop up showing you your Swatches (Fig.13c). Save them. Now you can Load the new set from your Swatches palette menu (click on the small arrows in the top right corner to see the menu), and away you go!

Conclusion

With this I shall leave you until next chapter,

Nykolai Aleksander

For more from this artist visit

<http://www.admemento.com/>

or contact

x@admemento.com

3DTotal presents the new issue of **3dcreative**
magazine: a downloadable monthly magazine for
concept art, digital & matte painting for only **£2.75** (approx \$3.78 - €2.93)

3dcreative
Issue 049 September 2009

Interview
Hao Ai Qiang

The Gallery
Jonathan Simard, Nikita Veprikov,
Deniz Ozemre & more!

FREE Inside Look
Digital Art Masters: Volume 4
Project Overview by Michal Kwolek

Project Overview
"Le Rabbit" by Jose Alves da Silva

PHOTOSHOP SPECIAL

POST-PRODUCTION & CUSTOM TEXTURES

Next-Gen Character Creation
Joseph Harford wraps up sculpting the high-poly mesh in ZBrush in the fourth part of this multi-software tutorial series

Photoshop for 3D
Richard Tilbury shows us how to add volumetric lighting and particle effects to our 3D scenes

Amphibian Man
Bruno Melo returns to take on the latest topic of an "amphibian-man" in the ZBrush "Manimal" Creation series

Creating Custom Textures in Photoshop
Richard Tilbury looks at the value of bump and specular maps, and how overlay maps can help disguise tiling issues

visit www.3dcreativemag.com
to download the free 'lite' issue, the full issue, subscription
offers and to purchase back issues.

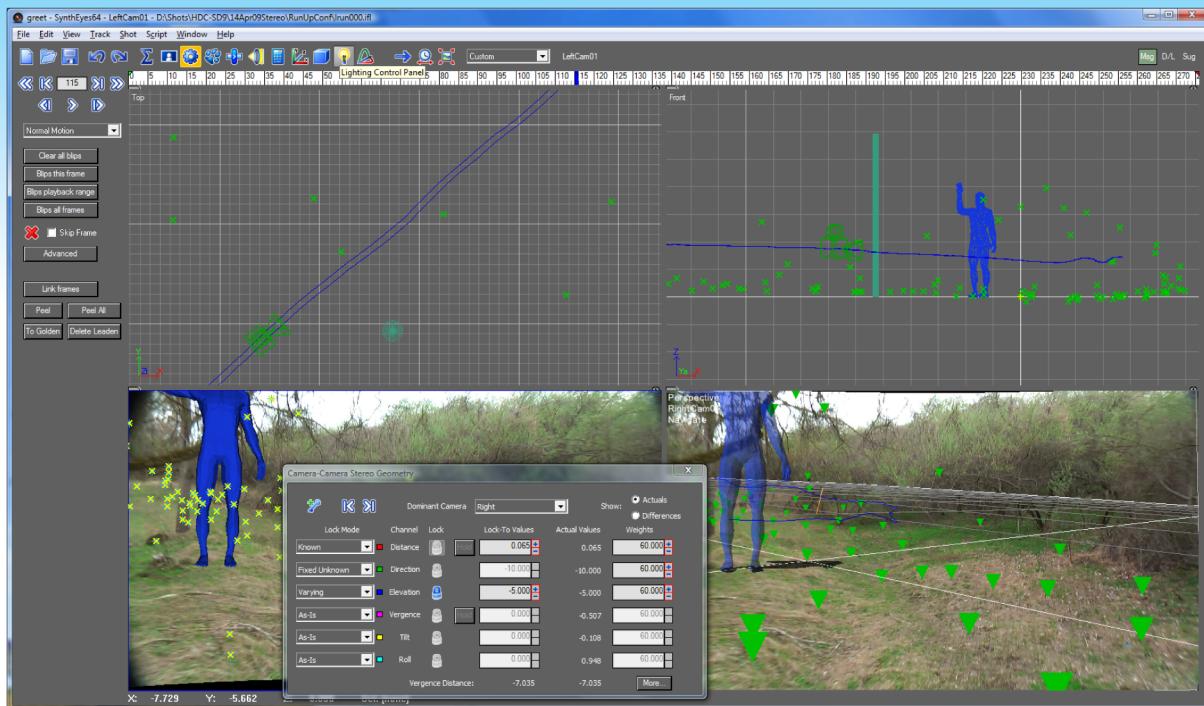




SynthEyes

Match-moving and Stabilization

Now with STEREOSCOPIC 3D support!



Available in both 32- and 64-bit versions for both PC & Mac starting at \$399

"Whatever happened to `get a cup of coffee while the tracker is solving`?"

"Saved my life!"

"I just loaded a quick file into the demo I downloaded, I am blown away."

Typical Applications
Fixing Shaky Shots
Virtual Set Extensions
Animated Character Insertion
Product Placement in Post-Production
Face & Body Motion Capture
Talking Animals

"You've got a great product at an incredible price."

ANDERSSON TECHNOLOGIES LLC
<http://www.ssontech.com>

Sixth year in the market, serving artists in over 60 countries

“The design is somewhat abstract because with the method I used kept changing the shapes until I found something interesting – this made the work more fun and the results became more of a surprise to me.”



HOVERCRAFT PARROT

MAKING OF BY DAVID MUÑOZ VELAZQUEZ

David Munoz Velazquez is no stranger to 2DArtist; impressing us once more with his character concept, “Hovercraft Parrot”, we welcome David back to issue 45 to talk us through the creation process of this intriguing design. Based on a great back story, find out how David breathes life into his designs through his skilful brushwork and his ability to meld the rough with the smooth!

Hovercraft Parrot

Making Of

Making Of 'Hovercraft Parrot'

Software Used: Photoshop

About Hovercraft Parrot

This is a character design which is in fact more the design of a vehicle to be used for personal transport, or racing. It has to be like a hovercraft because the surface of the planet is very rough covered by small, crystal, organic plants. These tiny plants emit an electrical power and have small magnetic shields; they are connected to one another and they give energy to the planet and its inhabitants. The armor – the vehicle – absorbs the energy simply by gliding over these energizing plants.

"I like to improvise whilst I create a character"

Most of the planet's surface is covered by these plants, as well as bushes and very small, dark rocks. The blue electrical plants are the ones that connect together – if there is too much energy they will blow away, eroding the terrain, but in doing so they create a surge of energy through which more of these new plants will come to life to take their place.

The planet doesn't have any sun or water; it is simply driven by the energy of the electrical



Fig.01



Fig.02

organisms. The design is somewhat abstract because with the method I used kept changing the shapes until I found something interesting – this made the work more fun and the results became more of a surprise to me.

Brushes

These are the brushes I used to create Hovercraft Parrot (Fig.00). I like to use several brushes in order to get more texture and detail variation without actually using any textures.

Concept

I started by drawing a quick concept, focusing on the top part of the character first and foremost (Fig.01). Here I was working quite simply with general shapes that I liked, but they did of course change throughout the process, as you'll see.

At this point, I'm using brushes 3 and 4 from the before-mentioned brushes (see Fig.00).

Lighting, Color & Detail

Still using brushes 3 and 4, the next stage was all about lighting and color, although nothing was yet definitive at this part of the process (Fig.02). I like to improvise whilst I create a character and so avoid making any final decisions so early on.

I started trying some ideas out at the bottom part of the character here (Fig.03) – I didn't think the legs were working as a humanoid type. Still adding lighting and some detail, and still using brushes 3 and 4 (Fig.00) – not thinking about the background, but knowing that it was going to be dark or cloudy to compliment the character design and the concept.

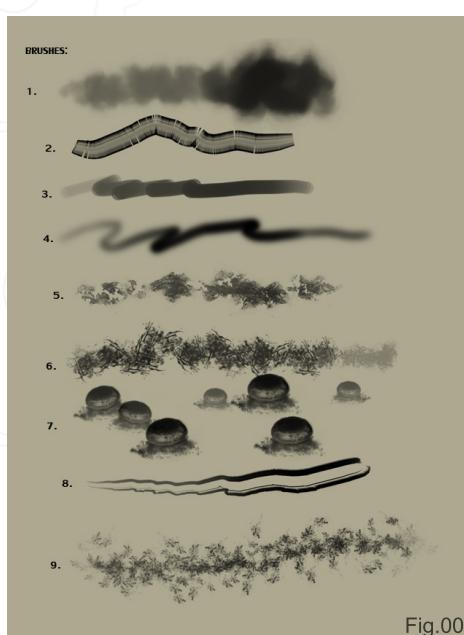


Fig.00



Fig.03



Fig.04



Fig.05

Refining the design further still (still brushes 3 and 4), I made a clear decision about the bottom part of the character at this stage; it was here that I knew I wanted it to be hovercraft looking (**Fig.04**).

I then changed some elements on the armor and the engine, trying to make it look more mechanical (again, using brushes 3 and 4) (**Fig.05**).



Fig.06

Another clear idea for the design I came up with was to give him wings to glide – some kind of flaps which, as well as being purposeful to help him in flight, are also built like armor for protection (**Fig.06**). I'm still using brushes 3 and 4!

To finish up the character before moving onto the character, I changed some proportions and made some final design changes. I also

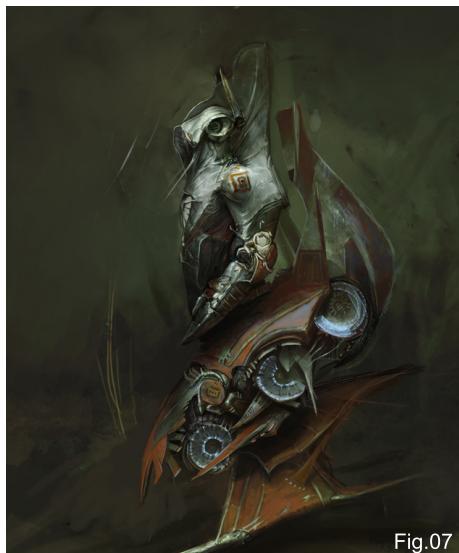


Fig.07

added some light effects to the flying engine – I think they look clearer in their function like this (**Fig.07**). I was still using brushes 3 and 4 here – we're about to see how the other brushes were used, though!

The Background

For the background design, I separated the figure onto a different layer to be able to paint behind it. I had more or less a clear of how the



Fig.08

Hovercraft Parrot Making Of

colors and lighting were going to be similar to the colors I used during the character design.

You can see that I started to apply some shapes and color down, using brushes 3 and 4, and also introducing brushes 1 and 5 (see **Fig.00**) to the mix, too (**Fig.08**).

"Keeping the desaturated tones I added some yellow-brown hints"

Using brushes 7 and 8 (see **Fig.00**) I continued to add the small yellow plants, whilst brush 9 was helpful to apply some brightness and make the areas around the plants shine, indicating their ability to emit light and electricity (**Fig.09**).

Close-Ups

Here is a close-up of the background finished (**Fig.10**). At this point I'd used all of the brushes shown in **Fig.00**. Keeping the desaturated tones I added some yellow-brown hints to give it a mossy look, and I made it clearer that the plants were connected by adding some small sparks between them.



Fig.10



Fig.11

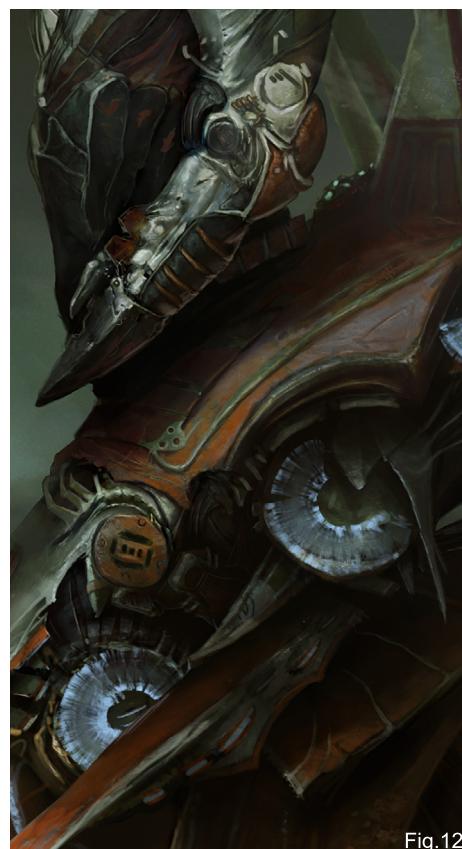


Fig.12



Fig.09

Finally, here is a close-up detail of the character; even for the final detailing I was using brushes 3 and 4 (**Fig.11-12**). I kept some areas more detailed and left others loose, adding color and shapes to give detail without explaining the shapes too much, keeping life in the brushwork and the design.

The final composition can be seen in **Fig.13**.
Thanks for reading!

David Munoz Velazquez

For more from this artist visit
<http://www.munozvelazquez.com/>
 or contact
 munozvelazquez@gmail.com



O
O
O

Fig.13

nPower CAD Translators for Maya

Break thru the Maya CAD barrier with high performance translation technology from nPower.

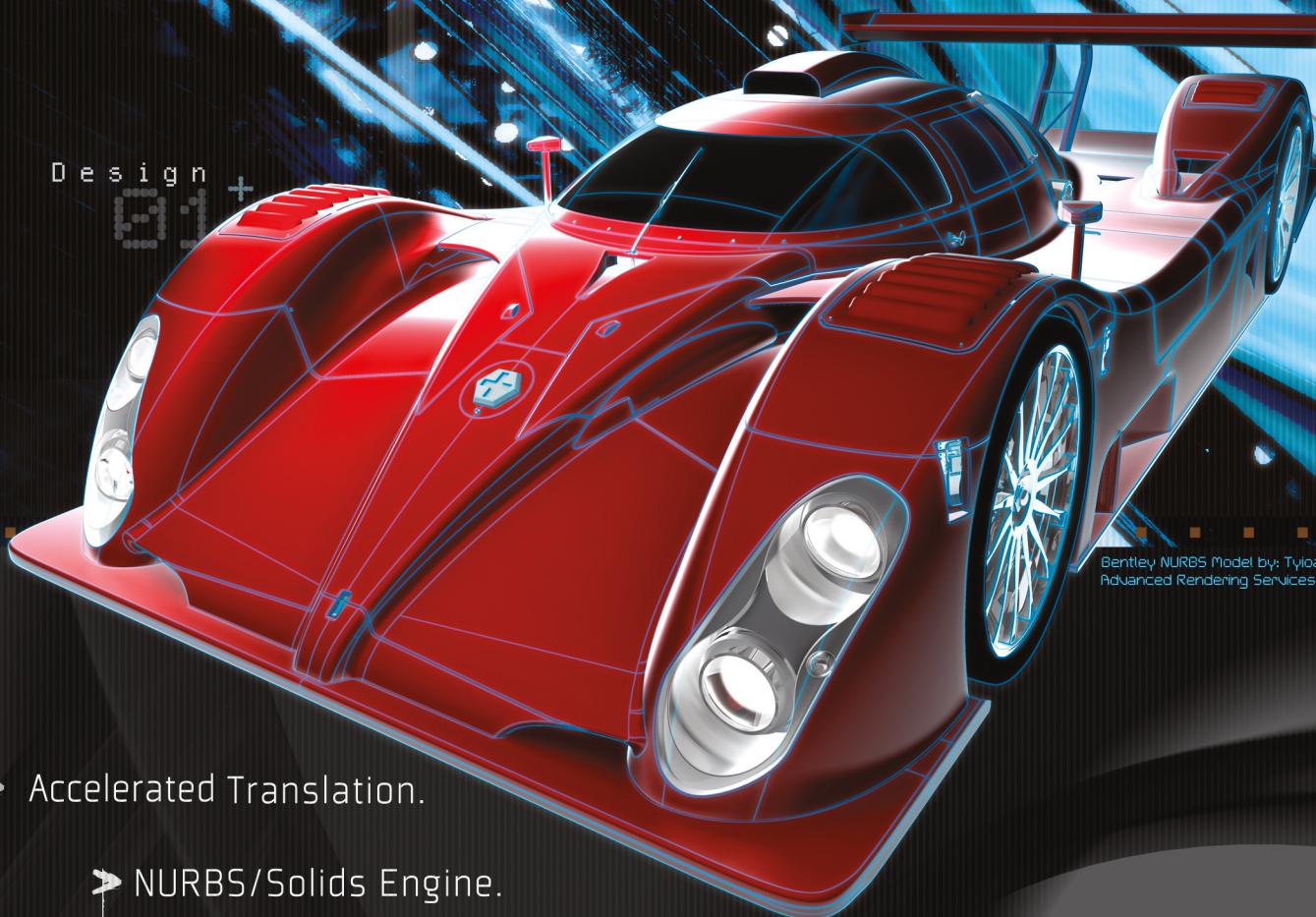
Go Beyond

Think

Design



Innovation +



Bentley NURBS Model by: Tylo Advanced Rendering Services.com

- Accelerated Translation.
- NURBS/Solids Engine.
- Absolute Precision.
- Supports: IGES, STEP, SAT, and Rhino models.
- New Support for Maya on the Macintosh.
- Advanced Memory Management.



To find out more about nPower CAD Translators for Maya Visit us at www.nPowerSoftware.com

DIGITAL ART MASTERS VOLUME 4



4
VOLUME

Focal
Press



With the release of 3DTOTAL's latest book,
Digital Art Masters: Volume 4, we have
some exclusive chapters for you...

This book is more than just an artwork book. Not only does it feature full-colour, full-page images, but each artist has given a detailed description, in their own words, of the creation process behind each piece of published artwork. And they've done it especially for this book!

This month we feature:

**"Containment
Breach Sub-
Level 5"**
by Bradford Rigney

The following shots of the "Containment Breach Sub-Level 5" book pages are featured here in full-resolution and can be read by zooming in...



CONTAINMENT BREACH SUB-LEVEL 5

BY BRADFORD RIGNEY

SOFTWARE USED: Photoshop 7

CONCEPT

First of all, let me say how much of an honor it is to be a part of this book. I never dreamed my work would ever included alongside such gifted artists. I guess I've always considered myself to be a fan first and an artist second, so to be sitting here writing an overview of my own work feels pretty weird. I also sincerely want to thank whoever may be reading this for taking interest in my art and for taking the time to read something that a hopeless goofball like me would set to paper (seriously, just look at my portfolio).

The concept for this work was a simple one: terror. My work doesn't have any kind of deep meaning attached to it, and that's intentional; I want my concepts to be primitive, high-impact and accessible. Life, death, sexuality and fear are all themes that I'm obsessed with capturing, probably due to my exposure to Richard Corben and Frank Frazetta, who are both my larger-than-life heroes, at a very young age. What Frazetta and Corben do for me is instill a sense of cinema, a "suspension of disbelief", and a sense that what I'm seeing exists and has history. They transported me to other worlds, and I decided early on in my drawing career that I wanted my work to have that effect, too.

For this particular work, I was shooting for a tangible sense of dread, of chaos and hopelessness, of being trapped in a predator's gaze with no way of escape.



also wanted a mysterious, subterranean, sci-fi flavor to be immediate, which prompted the title. In addition to all this, I wanted to hint at the theme of mankind tampering with things he shouldn't, which is why I put what could be interpreted as a "contained" specimen of the monster in a sort of cryo-embryo-tank over there on the right hand side of the composition. The idea of mankind paying horrifically for his scientific ambitions was always a cool cliché in sci-fi, I thought, and incorporating that idea here was definitely a goal. I also can't stress enough that, as a child of the 80s, I've survived on a steady diet of horror movies, Creepy magazine, D&D and death metal. Inevitably all of that thick, yummy goodness gets distilled into my ideas and this one isn't any different.

THE MAKING OF CONTAINMENT BREACH SUB-LEVEL 5

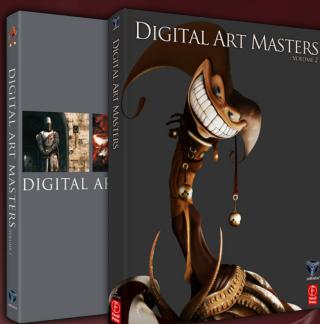
I'm a failed 3D modeler, crappy oil painter and self-taught illustrator, so hopefully what I have to offer will be useful to those of you who are trained, and won't be too far off-course for those of you who aren't. Much of what I do is intuition-based, while capitalizing on any happy mistakes.

I don't ever use reference material, but I will look at a few photos to make sure the hand-drawn results are accurate. Everything is done from start to finish in Photoshop 7, using a Wacom tablet. Basically, I start off with a warm or cool base and lay down big blobs of dark value with a huge brush set at around 40% opacity. I then apply a radial blur or motion blur – sometimes both – and work the movement until I have something that "feels good". After I have a "stage" set on the canvas, I lay down figures in the general poses that "feel right", with a smaller brush (of the same opacity). Once the figures are arranged, I make a duplicate layer and save it, so I can work on the duplicate without losing what I have. With the basics down, I begin to add more value with the same brush, using the history brush to shape the figures and scenery until the idea becomes less nebulous. The end result (Fig.01) is a skeleton for the next "phase", which is the lighting.

The next phase (Fig.02) is all about laying in both color and light, usually with a smaller brush (set at the same

Fig.01

193



DIGITAL ART MASTERS: VOLUME 1, 2, 3 & 4

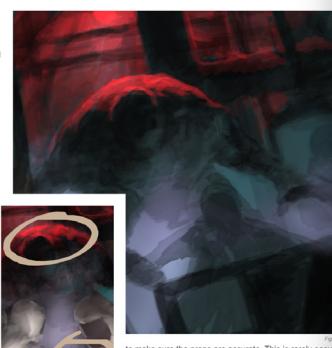
Now available from the 3DTOTAL shop: <http://www.3dtotal.com/books/>

(Note: if a security dialogue box appears, tick 'Remember', then click 'Allow')



40% opacity) and a large dodge tool set at around 16% for highlights, emphasizing the light source while using the history brush to control where it falls. For this work I knew I wanted soft backlighting, strong under-lighting and harsh rim-lights, a classic horror movie scheme.

At this point (Fig.03) I've made strong thematic changes. Initially, I wanted the foreground figures to be lab-coat scientists. But once the work started to evolve, it seemed right to put them in hazmat suits which I felt made them more fragile. This was also to imply that the viewer is a part of this containment team, with the first-person view taken into consideration while one of the victims engages the viewer. At this point, I hunt for photographs



to make sure the props are accurate. This is rarely easy since what I'm looking for is generally never in the same position or light as my composition. But that's alright; it gets me thinking in three dimensions, which ultimately is the exact effect I'm going for.

The next step is the meat and potatoes. Probably the most important tool I use is the smudge tool, which I keep set to around 40%. If you take a close look (Fig.04) you can see where I basically use the smudge tool to "sculpt" pixels into place. From here until the finish, I'll be using that very smudge tool technique in addition to the dodge, lasso and history brushes, with regular paintbrushes to refine the work.

Now comes the critical phase (Fig.05): finalizing body language, expressions, anatomy, evolving the foci and detailing. This is the most time consuming and rewarding aspect of the process. Comparing this phase (Fig.05) with the end result, you can see where many structural changes have taken place, particularly in the expressions and attitude. These changes of critical importance to my goal of eliciting sympathy for the victims and fear of the monster.

The camcorder screen (Fig.06) was created by selecting an area of the creature and running it through a channel mixer to get a "video" look. Then I selected bands of the

screen and ran them through various filters (motion blur, shear and mezzotint) to ideally achieve an interrupted signal effect. The symbols are hand-drawn while the lettering is done with the text tool. Finally, a film grain is added.

Once everything feels finished, I merge all layers, then jack up the saturation and contrast before finally applying an unsharp-mask filter to make it all "pop".

CONCLUSION

So did I succeed in creating a creepy, high-impact horror piece?

That's something I'd like to leave up to you to decide.



Fig.06

ARTIST PORTFOLIO



ALL IMAGES © BRADFORD RIGNEY

194

SCI-FI

195



**Have your 2DArtist
Magazine Download link
delivered automatically
to your inbox every
month...and have it
before anyone else!**

Subscribe

SUBSCRIBE NOW & SAVE UP TO 25%
on this already amazing value publication!

12 ISSUES FOR THE PRICE OF 9
£24.75 save £8.25 (approx - \$35.91 save \$11.97)

6 ISSUES FOR THE PRICE OF 5
£13.75 save £2.75 (approx - \$19.95 save \$3.99)

2DA next month

Here is what's in the next issue of 2DArtist

Interviews

Jason Seiler

Tutorials

Using 3D as a Base for 2D Painting

Part 4 by Carlos Cabrera

Custom Brushes:

Part 3

Dynamic Characters!

Part 4: Dynamic & Exaggerated Poses

by Mark McDonnell

Beginner's Guide to Digital Painting:

Part 3 by Nykolai Aleksander

Galleries

another **10 of the best**

Images from around the world!

visit www.2dartistmag.com for full information and to purchase current and previous issues for only £2.75 each!

image: Guillaume Menuel



3dtotal.com

Is a resource website for the CG community; amongst our growing number of products for CG artists, we produce two monthly downloadable PDF magazines – *2DArtist* and *3DCreative*. We are based in the West Midlands, in the UK, and our intention with our magazines is to make each issue as full of great articles, images, interviews and tutorials as possible. If you would like more information on 3DTotal or our magazines, or if you have a question for one our team, please use the links below.

Contact Information

<http://www.3dtotal.com>

<http://www.3dcreativemag.com>

<http://www.2dartistmag.com>

Editor & Content Manager > Lynette Clee

lynette@3dtotal.com

Lead Designer > Chris Perrins

chrisp@3dtotal.com

Marketing > Jo Hargreaves

jo@3dtotal.com

Partners

If you have a CG community website and would like to support *3DCreative* and/or *2DArtist* magazine by showing our banners, please contact Lynette Clee at the email address above

